FOOD PATENTS VOL 7,1985

Vol. 7 No. 1

Jan.-Mar. 85

FOOD PATENTS

ISSN 0253 - 4916

HC

Central Food Technological
Research Institute, Mysore – 570 013
(C.S.I.R., India)

National Information System for
Science and Technology
Dept. of Science and Technology

CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE
NATIONAL INFORMATION CENTRE FOR FOOD SCIENCE AND TECHNOLOGY (NICFOS)

SUBSCRIPTION ORDER FORM

The Director,
Central Food Technological
Research Institute,
MYSORE - 570 013 (India)

Dear Sir,

Please enter my/our subscription for the following* publications for _____.
(year)

		Annual Subscription	
		Indian	Foreign
		Rs.	US $
1.	Food Technology Abstracts (Monthly)	45.00	20.00
2.	Food Digest (Quarterly)	30.00	15.00
3.	Food Patents (Quarterly)	15.00	10.00

*Tick items required.

Cheque/Demand Draft/Postal Order for Rs._____/$ _____ in the name of Director, CFTRI, Mysore - 570 013, India, is enclosed.

Signature :

NAME &
Full Address :
(In block
letters)

Encls:

Date :

FOOD PATENTS

Vol. 7 No. 1

Jan.-Mar. 85

National Information Centre for Food Science and Technology
Central Food Technological Research Institute,
Mysore — 570 013, India

Annual Subn.:Rs.15.00 $10.00 Single copy: Rs.5.00

CONTENTS

ENGINEERING AND EQUIPMENT ... 1

PRESERVATION AND PACKAGING ... 1

CHEMISTRY AND ANALYSIS ... 3

FOOD ADDITIVES ... 5

CEREALS AND MILLETS ... 8

PULSES, OILSEEDS AND NUTS ... 9

TUBERS, VEGETABLES AND FRUITS ... 10

SUGAR, STARCH AND CONFECTIONERY ... 10

BAKERY PRODUCTS .. 12

MILK AND DAIRY PRODUCTS ... 12

MEAT, FISH AND POULTRY ... 14

FRUIT JUICES AND SOFT BEVERAGES ... 15

FATS AND OILS ... 16

SPICES AND CONDIMENTS ... 19

DIETETIC AND PROTEIN FOODS ... 20

MICROBIOLOGY AND FERMENTATION (including Alcoholic Beverages) ... 21

INFESTATION CONTROL AND PESTICIDES ... 28

WASTE UTILISATION ... 34

ENGINEERING AND EQUIPMENT

1 Portable gas cooker whose elements are all dismountable

APPLICATIONS DES GAZ,

India 152 923

The gas cooker described in this patent is intended to be placed on the top of a tank (or gas cylinder) whose centre is fitted with a burner that includes a needle valve operated by a knob. It has a frame made from a circular collar whose diameter is less than that of the tank, so that it can rest on the shoulder of the tank. The collar has three axles around which supports (for pans) can swivel. All the parts of the cooker can be packed separately from the tank, thus reducing the total bulk (or volume) during transportation.

2 Improved cylical centrifugal machine and a system for controlling transmission of torque

THE WESTERN STATES MACHINE CO

India 152 906

The cyclical centrifugal machine described in the patent includes a:- (i) a rigid support mounted above the basket of the machine; (ii) a bearing housing suspended from the support, for gyratory motion; (iii) a basket-carrying spindle rotatable in a fixed position relative to the housing, on bearings therein; and (iv) an electric motor for bringing the spindle and basket to rotational speed. Such machines can be used to separate liquid from solids, in large-scale industrial processes, such as the drying of sugar, dextrose, or other crystalline or granular materials.

PRESERVATION AND PACKAGING

3 Oxygen indicator inks for food preservation

TOPPAN PRINTING CO LTD

Japan 59 61,778 (April 1984)

4 Method and apparatus for drying products, especially corn or piece products

ENERGIAGAZDALKODASI INTEZET

India 152 995

Grains, or granular products, can be dried by passing through them a current of drying gas (air) which has previously been dried by being brought in contact with a desiccant liquid (e.g. calcium chloride solution). The desiccant liquid can be regenerated by using heat that would be otherwise wasted. An effective and economical drying is obtained by making the material travel along a drying path which has at least two sections through which the drying gas flows. This arrangement is particularly advantageous when a small amount of material has to travel over a long path, and the drying gas is air, working under conditions similar to those of the environment.

5 Dried spherical foods

AJINOMOTO CO INC

Japan 59,125,851 (July 1984)

6 Dehydrating devices for fish, vegetables and fruits

SHOWA DENKO KK

Japan 59 90,603 (May 1984)

7 Removal of harmful impurities from a gas medium of cooling chambers for storage of food products

KAUNAS DISTRIBUTION FREEZER

USSR 1,101,284 (July 1984)

8 Intermediate moisture food preservation

GENERAL FOODS CORP

Canada 1,168,078 (May 1984)

9 Packaging fresh agricultural products

TECHNOLOGICAL BUREAU OF EXPERIMENTAL MFG

East Germany 160,672 (February 1984)

10 Apparatus for printing indicia on objects

SUNKIST GROWERS INC

India 153 189

The object of the invention is to provide a printing apparatus in which inks of different colours and characteristics may be selectively and interchangeably used in the application of indicia. The machine is particularly useful for making citrus fruits like lemons and oranges with differently coloured inks.

11 Cellulose-containing food wrapper
TEE-PAK INC
West Germany 3,408,409 (September 1984)

12 Thermoplastic container for food.
COSDEN TECHNOLOGY, INC
France 2,539,106

13 A method of treating a tinplate surface to prevent sulphide staining
METAL BOX LTD
India 153 012

In order to minimize discolouration of a tinplate surface by sulphide staining, the surface is first washed with an aqueous solution - which is free from organic polymeric materials - of ammonium zinconium carbonate containing 0.2-2% w/w of the zinconium calculated as ZrO_2 and then heated (20-300 C) to form a protective zirconium film on the surface. The aqueous solution may contain an inorganic salt such as a phosphate, a silicate, or a borate. The tinplate surface may also be subjected to a preliminary cleaning by passing a current between it and an auxiliary electrode dipped into the above-mentioned solution.

CHEMISTRY AND ANALYSIS

14 Determination of patulin in foods
INSTITUTE OF NUTRITION
USSR 1,103,146 (July 1984)

15 Modified oligosaccharides used as substrates for measuring α-amylase activity
WAKO PURE CHEMICAL INDUSTRIES LTD
Europe 104,047 (March 1984)

16 Preparation of enzyme granules
NAGASE SEI KAGAKU KOGYO KK FUJI PAUDAL CO LTD
Japan 59 88, 088 (May 1984)

17 Enzyme separation by chromatography on 10-carboxydecylsepharose

East Germany 207,928 (March 1984)

18 Determination of dehydrogenases and their substrates
ADADEMIE DER WISSENSCHAFTENDER DDR
DD 208,675 (April 1984)

19 Apparatus for the determination of activities of glutamate oxaloacetate transaminase, glutamate pyruvate transaminase and lactate dehydrogenase.
TOSHIBA CORP
Japan 59 98,681 (June 1984)

20 Purification of a carboxylase
Japan 59 71,689 (April 1984)

21 Purification of peroxidase
INSTITUTE OF BOTANY
USSR 1,108,102 (August 1984)

22 Reagents for determination of amylase
TOYOBO CO LTD
Japan 59 85,300 (May 1984)

23 Analytical element for determination of amylase isoenzyme
FUJI PHOTO FILM CO LTD
Japan 59 42,897 (March 1984)

24 -1-Proteinase inhibitor
MILES LABORATORIES, INC
United State 4,439,358 (March 1984)

25 Isolation and purification of glucose oxidase
East Germany 207,930 (March 1984)

26 Determination of lipase activity
CENTRAL SCIENTIFIC-RESEARCH INSTITUTE OF GASTROENTEROLOGY
USSR 1,091,065 (May 1984)

27 Composition for lipase determination
TOYO JOZO CO LTD
West Germany 3,342,106 (June 1984)

28 Analytical device for determination of transaminases
MUTSUBISHI PETROCHEMICAL CO LTD
Japan 59,109,170 (June 1984)

29 Measurement of alkaline protease activity
NIPPON OIL SEAL INDUSTRY CO LTD
Japan 59,135,899 (August 1984)

30 Method and reagent for the differential analysis of isoenzymes of alkaline phosphatase
BOEHRINGER MANNHEIM G.M.B.H.
WO 84 02,720 (July 1984)

31 Determination of vitamin K_1
UKRAINIAN SCIENTIFIC-RESEARCH INSTITUTE OF POULTRY FARMING
USSR 1,109,631 (August 1984)

FOOD ADDITIVES

32 Stable protein-sugar foam with high gas content
INSTITUT FUER GETREIDEVERARBEITUNG DER DDR VEB KOMBINAT NAHRUNGSMITTEL UND KAFFEE
West Germany 236,731 (August 1984)

33 Low-sodium salt substitute
United States 4,473,595 (September 1984)

34 Low-sodium salts for processed meat products
ICHIKAWA KAGAKU KENKYUSHO CO LTD
Japan 59,118,038 (July 1984)

35 Balanced sodium and potassium table salt composition
NITTEN CO LTD
Japan 59 66,858 (April 1984)

36 Obtaining sodium alginate from algae
MOSCOW INSTITUTE OF THE PEOPLE'S ECONOMY
USSR 1,113,078 (September 1984)

37 An improved process for the manufacture of food grade dicalcium phosphate from rock phosphate
THE FERTILIZER (PLANNING AND DEVELOPMENT) INDIA LTD
India 152 911

Rock phosphate is first digested in dilute (18-25%) nitric acid and the reaction mixture is then treated (or neutralized) with calcium carbonate in two stages to a pH not exceeding 5.5 This step ensures dissolution of all impurities from the digested liquor along with some quantity of dicalcium phosphate; and further, yields a dicalcium phosphate of food grade, free from impurities.

38 Food preservative composition
STAY FRESH INC
United States 4,476112 (October 1984)

39 Agent for maintenance of food freshness
AGENCY OF INDUSTRIAL SCIENCES AND TECHNOLOGY MINATO SANGYO KK
Japan 59,143,576 (August 1984)

40 Antioxidants for coating
NIPPON OILS AND FATS CO LTD
Japan 59 71,387 (April 1984)

41 Composite antioxidant
T CO LTD
Japan 59 75,978 (April 1984)

42 Coloring agents
McCORMICK AND CO INC
Great Britain 2,132,205 (July 1984)

43 Anthroquinone food coloring
DAISHO CO LTD
Japan 59,120,075 (July 1984)

44 Preparation of pigment carotenoids
SAN EiCHEMICAL INDUSTRIES LTD
Japan 59 91,155 (May 1984)

45 Uses of methyl substituted 2-(2,6-dimethyl-1, 5-heptadienyl)- 1,3-dithiolanes in augmenting or enhancing the aroma or taste of food stuffs
INTERNATIONAL FLAVOURS AND FRAGRANCES INC
United States 4,464,408 (August 1984)

46 A flavoring agent
SOCIETE D'ASSISTANCE TECHNIQUE POUR PRODUITS NESTLE SA
United States 4,466,986 (August 1984)

47 Flavoring material and process for producing drinks and foods excellent in flavor.
KIKKOMAN CORP
United States, 4,463,024 (July 1984)

48 1,1-Bis (mercapto and alkylthio) alka-2,4-dienes as flavoring compounds
GENERAL FOODS CORP
Great Britain 2,129,419 (May 1984)

49 Dipeptide sweeteners in the form of shaped bodies
AJINOMOTO CO INC
Europe 106,910 (May 1984)

50 Gucopyranosylstevioside sweeteners fro stevia
IDEDA TOKA INDUSTRY CO LTD
Japan 59 71,662 (April 1984)

51 Sorbitol production with pichia
AGENCY OF INDUSTRIAL SCIENCES AND TECHNOLOGY
Japan 59 82,088 (May 1984)

52 Lozenge type tablets from sorbitol and crystallized fructose
ROQUETTE FRERES SA
France 2,537,844 (June 1984)

53 High acid monocalcium phosphate
STAUFFER CHEMICAL CO
United State 4,454,103 (June 1984)

54 Encapsulated butylated hydroxyanisole
ESTMAN KODAK CO

55 Stable vitamin K preparations
AKADEMIA ROLNICZA, WARSZAWA
Poland 122,725 (December 1983)

CEREALS AND MILLETS

56 Determination of grain quality
SIBERIAN INSTITUTE OF PLANT PHYSIOLOGY AND BIOCHEMISTRY
USSR 1,114,947 (September 1984)

57 Cereal germ extracts
MEIJI MILK PRODUCTS CO LTD
Japan 59 74,962 (April 1984)

58 Preservation of cooked rice
QP CORP
Japan 59 74,958 (April 1984)

59 Production of gliadin of high purity from wheat proteins
HOUSE FOOD INDUSTRIAL CO LTD
Japan 59 01,497 (January 1984)

60 Wheat germ oil
VITAMINS INC
Australia 536,827 (May 1984)

61 Flour and its partial pregelatinization
SOCIETE DES MOULINS DE WESTHOVE SA
France 2,533,417 (March 1984)

PULSES, OILSEEDS AND NUTS

62 Oilseed extraction
SHELL OIL CO
United State 4,456,557 (June 1984)

63 Proteins from oil seeds
AKADEMIE DER WISSENSCHAFTEN DER DDR
East Germany 208,820 (April 1984).

64 Proteins from plant sources
VEB SCHWERMASCHINENBAU KOMBINAT
West Germany 3,305,984 (May 1984)

65 Deodorization of soybeans
Japan 59,120,067 (July 1984)

FRUITS AND VEGETABLES

66 Protection agent for fruits and vegetable tubers
WHEATLEY CHEMICAL CO LTD
Europe 104,902 (April 1984)

67 Fresh fruit and vegetable storage
JAPAN VACUUM ENGINEERING CO LTD
Japan 59 88,041 (May 1984)

68 Flavor and shelf-life improvement of pickled vegetables
QP CORP
Japan 59 74,951 (April 1984)

SUGAR, STARCH AND CONFECTIONERY

69 A process for the isomerization of glucose by contacting a glucose containing solution with an immobilised glucose-isomerase system

CPC INTERNATIONAL INC

India 152 971

A glucose isomerase system, obtained from *S. olivochromogenes* (ATCC Nos 21, 114, 21, 718; 21,714; or 21,715), and immobilized on a porous phenolic resin is used in this invention. The above mentioned system has a high binding capacity for glucose isomerase, high flow rates, long column life, and low enzyme consumption; thus it is extremely at-ractive as an economicslprocess

70 Continuous enzymic process for producing maltose from starch and starch hydrolysates

CPC INTERNATIONAL INC

India 152 971

71 Honey powder in which the natural flavors are preserved
CHINOIN GYOGYSZER ES VEGYESZETI TERMEKEK GYARA RT
Europe 110,170 (June 1984)

72 Confectionary coating compositions containing polyglycerol ester emulsifiers
SCM CORP
United State 4,464,411 (August 1984)

73 Enzymic purification of fructooligosaccharides
MEIJI SEIKA KAISHA LTD
Japan 59 95,895 (June 1984)

74 Fermentation production of polysaccharides
IMPERIAL BIOTECHNOLOGY LTD
Europe 112,661 (July 1984)

75 Separation of polysaccharide
MITSUBISHI PETROCHEMICAL CO LTD
Japan 59 85,297 (May 1984)

76 Oxidizing L-sorbitol to L-fructose
NABISCO BRANDS INC
United States 4,467,033 (August 1984)

77 Candies with a jelly filling
POMORSKIE ZAKLADY PRZEMYSLU CUKIERNICZEGO
Poland 122,201 (December 1983)

78 Monoglycerides
NIPPON OILS AND FATS CO LTD
Japan 59 118,094 (July 1984)

BAKERY PRODUCTS

79 Additive mixture for decreasing the adhesion of dough
INSTITUT FUER GETREIDEVERABEITUNG DDR
East Germany 208,912 (April 1984)

80 Soybean proteins for bread enrichment
FUJI OIL CO LTD
Japan 59,118,034 (July 1984)

81 Liquid cake mix composition
MEIJI MILK PRODUCTS CO LTD
Japan 59 20,329 (May 1984)

82 Aging control in noodles
Japan 59,125,858 (July 1984)

MILK AND DAIRY PRODUCTS

83 Determination of carbohydrates in dairy mixtures
ALL UNION SCIENTIFIC RESEARCH INSTITUTE OF THE BUTTER AND CHEESE MFG INDUSTRY
USSR 1,108,355 (August 1984)

84 Preserving agent for milk
BOOTS CO PLC
Europe 112,100 (June 1984)

85 Studying milk for fat and protein content
BELORUSSIAN STATE INSTITUTE FOR THE ADVANCED TRAINING OF PHYSICIANS
USSR 1,089,516 (April 1984)

86 Electro-optical analyser for measuring percentage by weight of fat, protein and lactose in milk
Canada 1,160,864 (January 1984)

87 Device for analysis of milk

AGROPRIBOR SCIENTIFIC-INDUSTRIAL ENTERPRISES

USSR 1,099,281 (June 1984)

88 Apparatus for heat treatment of milk and the like

ALFA LAVEL AB

India 153 288

An apparatus has been designed to heat-treat milk as it comes from the milking machine, so that it does not spoil during subsequent storage. It comprises a heat exchanger, where the milk is heated to the required high temperature by means of heated water, and a holding vessel in which the milk is kept during a pre-determined period. A regenerative section in the heat exchanger has a space where the incoming milk is heated as it enters the heating section, and another space where heated milk. The holding vessel consists of a coil between the heating section and the regenerative section of the heat exchanger. An additional heat exchanger may be employed for cooling the heated milk as it passes through the regenerative section.

89 Process and apparatus for coagulation of milk by the acid method

PILLET S.a.r.l.

France 2,538,678

90 Detection of lactam ring antibiotic in milk by enzyme immunoassay

RESEARCH TRIANGLE INSTITUTE

Canada 1,172,164 (August 1984)

91 Cheese additive

INSTITUT FUER MILCHWIRTSCHAFT BEIM MINISTERIUM FUER LAND FORST UND NAHRUNGSGUETERWIRTSCHAFT

East Germany 210,602 (June 1984)

92 Soyabean cheese substitutes

KAWAHARA TANNE

Japan 59,135,838 (August 1984)

93 Deionization of wheys and ultrafiltration brines to extract proteins and lactose
LACTO SERUM FRANCE
Europe 115,992 (August 1984)

94 Calcium salts production from whey
MEIJI MILK PRODUCTS CO LTD
Japan 59 78,644 (May 1984)

95 Whey treatment process and product
FOREMOST-McKESSON, INC
Great Britain 2,130,069 (May 1984)

96 Long-storable aromatized drinks based on acidified whey
LAITERIES E. BRIDEL
France 2,534,455 (April 1984)

MEAT, FISH AND POULTRY

97 Determination of freshness of marine and land animal meats
AJINOMOTO CO INC
Japan 59,107,256 (June 1984)

98 Determination of freshness of animal meats.
NOMURA RESEARCH INSTITUTE OF TECHNOLOGY AND ECONOMICS
Japan 59,130,200 (July 1984)

99 Preservation of meat products
STAUFFER CHEMICAL CO
United States 4,443,484 (April 1984)

100 Improvement of canned fish quality
TAWARA CANNING CO LTD
Japan 59 74,949 (April 1984)

101 Quality improvement in fish paste products
KIBUN CO LTD
Japan 59 26,261 (June 1984)

FRUIT JUICES AND SOFT BEVERAGES

102 An improved aerated water preparing and dispensing machine
GANPAT CHANDUSA SOLANKI
India 153 255

A simple preparing and dispensing machine for aerated water has been fabricated. It consists of a water pump, a water and gas mixing tank, a refrigerating coil around the tank, and an aerated water dispenser. Water and gas flow into the tank where the aerated water is continuously produced. A serving cock is provided over the tank; when pressed, it discharges aerated water into the container of the user.

103 Treating carbonated water by ion exchange
CADBURY SCHWEPPES LTD
Great Britain 2,128,978 (May 1984)

104 Filling of noncarbonated beverages
NIPPON NATIONAL SEIKAN CO LTD
West Germany 3,339,839 (August 1984)

105 Stable powdered fruit juice containing palatinose
MITSUI SUGAR CO LTD
Japan 59 82,073 (May 1984)

106 Protein-free coffee whitener
NATIONAL STARCH AND CHEMICAL CORP
United State 4,460,617 (July 1984)

107 Process for recycling coffee bean extract matter virtually free of caffeine to coffee beans extracted with the aid of an aqueous liquid and so decaffeinated
HACO A-G
Europe 108,038 (May 1984)

108 Decaffeination

SOCIETE D' ASSISTANCE TECHNIQUE POUR PRODUITS NESTLE SA

United State 4,465,699 (August 1984)

109 Decaffeination of roasted coffee

HAG GF A-G

West Germany

110 Process for making tea prills from tea fines or dust, and an apparatus therefor

LIPTON INDIA LTD

India 152 987

The invention relates to a process of making CTC tea or fannings, and the orthodox type of tea prills from tea fines or dust, as well as to an apparatus for carrying out the process. Tea fines or dust are first agglomerated with water, or a binder (e.g. gum Acacia, or a 5% solution of milk powder or lactose), in an oscillating granulator and a double-cone mixer. The wet charge is then dried at 100-103 C to the desired moisture level.

111 A method of preparing fired tea leaf in the form of pellets and the pellets so obtained

UNILEVER LTD

India 152 780

Fire tea leaf has been sucessfully pelleted by using the extruders and ring roll presses commonly used for producing animal feeds in a hard, compact, and free flowing form. Pelleting can also be applied to other plant material (mainly herbal material) which is used for preparing aqueous infusions. Pelleting reduces the risk of spoilage of fired tea leaf during transportation and storage. Methods of handling and transportation of the pellets, and of crushing them to obtain finely divided infusion material once again, have been described.

FATS AND OILS

112 Oleaginous compositions

PROCTER AND GAMBLE CO

United State 4,446165 (May 1984)

113 Antioxidants for oils and fats
MORINAGA CONFECTIONERY CO LTD
Japan 59,124,984 (July 1984)

114 Composition of fats and oils
Q.P. CORP
Japan 59,152,998 (August 1984)

115 Cooking oil regeneration
MATSUSHITA ELECTRIC INDUSTRIAL CO LTD
Japan 59,129,297 (July 1984)

116 Extraction of vegetable oils
IMPERIAL BIOTECHNOLOGY LTD
Great Britain 2,127,425 (April 1984)

117 Oilseed extraction process
SHELL OIL CO
United States 4,456,556 (June 1984)

118 Solvent extraction of oil bearing seeds
UNIVERSITY OF TORONTO
United States, 4,460,504 (July 1984)

119 Process and plant for the extraction of oil fruits and oil seeds
Europe 120,985 (October 1984)

120 A process for increasing phytosterols content in edible fats and oils
SNOW BRAND MILK PRODUCTS CO LTD
Japan 59,147,099 (August 1984)

121 A process for the selective hydrogenation of unsaturated fatty acid with a metallic catalyst in the presence of ammonia
HINDUSTAN LEVER LTD
India 152 P32

When catalysts like palladium platinum, rhodium, or iridium

are treated with dry ammonia, the hydrogenation of unsaturated fatty acids will proceed much more selectively; that is to say, the trienoic
12 acids will be hydrogenated first to dienoic acids, and the latter will be hydrogenated only thereafter. The ratio of ammonia to catalyst may lie in the range of 100:1 to 5000:1, and the temperature of the reaction from -20 to +100 C

122 A process for the selective hydrogenation of unsaturated fatty acid with a metallic catalyst in the presence of an amine

HINDUSTAN LEVER LTD

India 152 833

When unsaturated fatty acid derivatives (with 2m more double bonds) are hydrogenated in the presence of a catalyst such as palladium, platinum, and/or rhodium, the hydrogenation can be made much more selective by treating the catalyst with ethylene diamine, or a homologue or derivative thereof. The catalyst may also contain a promoter such
13 as Cu, Ag, Au, An, Sn, Ti, Zi, Hf, V, Nb, Ta, Cr, Mo, W, or Mn. The unsaturated fatty acid groups are hydrogenated without forming any saturated fatty acid groups at all, and relatively few trans-isomers are formed. Moreover, linolenic (or trienoic) acid groups are hydrogenated more readily than linoleic (dienoic) acid groups, ao that the end-products have a low content of linolenic acid, and a high content of linoleic acid.

123 Increasing polyunsaturated fatty acids in fats and oils

MORINAGA CONFECTIONERY CO LTD

Japan 59,109,597 (June 1984)

124 Edible emulsions

Netherlands 82 94m991 (May 1984)

125 Stable emulsions from fats and hydrolyzed lactose-containing lactoproteins for animal feed

CORNING GLASS WORKS

France 2,538,679 (July 1984)

126 Edible fat emulsion spread

UNILEVER PLC

Australia 537,002 (May 1984)

127 Low-calorie, spreadable water-in-oil emulsions

East Germany 209,963 (May 1984)

128 Fatty base for margarine

TASHKENT POLYTECHNIC INSTITUTE

USSR 1,093,696 (May 1984)

129 Method for producing phospholipids

CENTRAL-ASIAN SCIENTIFIC-RESEARCH AND DESIGN-CONSTRUCTION INSTITUTE OF THE FOOD INDUSTRY

USSR 1,082,374 (March 1984)

130 Quantitative determination of hydrophilic phosphatides in vegetable oils

ALL-UNION SCIENTIFIC-RESEARCH INSTITUTE OF FATS

USSR, 1,091,061 (May 1984)

131 Palm oil refining

AGENCY OF INDUSTRIAL SCIENCES AND TECHNOLOGY

Japan 59,142,296 (August 1984)

132 Regeneration agent of used frying oil

HARMELESS PRODUCT KK

Japan 59 81,398 (May 1984)

SPICES AND CONDIMENTS

133 Condiment composition

AJINOMOTO CO INC

Japan 59 78,666 (May 1984)

134 Calcium inosinate and calcium guanylate as condiments

AJINOMOTO CO INC

Japan 59 78,665 (May 1984)

135 Improvement of soy sauce aroma

KIKKOMAN CORP

Japan 59,125,865 (July 1984)

136 Reduced-menthofuran-content peppermint oil flavored compositions
WARNER-LAMBERT CO
Europe 113,989 (July 1984)

137 Combination semicontinuous and batch process for preparation of vinegar
NABISCO BRANDS INC
United States 4,456,622 (June 1984)

DIETETIC AND PROTEIN FOODS

138 Food emulsion
INSTITUTE OF NUTRITION
USSR 1,084,006 (April 1984)

139 Food supplement concentrate in a dense glasseous extrudate
GRIFFITH LABORATORIES USA INC
Canada 1,163,496 (March 1984)

140 Low-cholesterol foods
QP CORP
Japan 59,135,847 (August 1984)

141 Protein composition
BRITISH FOOD MFG INDUSTRIES RESEARCH ASSOC
Great Britain 2,134,117 (August 1984)

142 Recovery and treatment of plant proteins
AKADEMIE DER WISSENSCHAFTEN DER DDR
East Germany 210,837 (June 1984)

143 Protein material resembling meat
FUJI OIL CO LTD
Belgium 898,937 (June 1984)

144 Treatment of vegetable protein
STAUFFER CHEMICAL CO
BR 83,06, 658 (July 1984)

145 Phosphorylated soybean proteins
FUJI OIL CO LTD
Japan 59,120,056 (July 1984)

146 Functional bioproteins from microbial protein isolates
HOECHST AG
West Germany 3,248,568 (July 1984)

MICROBIOLOGY AND FERMENTATION

147 Biocatalytic reactor
MONSANTO CO
Europe 112,812 (July 1984)

148 Preparation of immobilized coenzymes
NITTO ELECTRIC INDUSTRIAL CO LTD
Japan 59 46,285 (March 1984)

149 Removal of pigments from the lipase of Aspargillus awamori
KEMEROVO SCIENTIFIC-RESEARCH INSTITUTE OF THE CHEMICAL INDUSTRY
USSR 655,150 (June 1984)

150 Microbiological test processes and apparatus
UNILEVER PLC
Europe 118,274 (September 1984)

151 Test for salmonella in food
INTEGRATED GENETICS INC
Euroep 114,668 (August 1984)

152 Microorganisms of the species Lactobacillus italicus, and their use in the production of lactic acid
KYOWA HAKKO KOGYO CO LTD
Europe 113,215 (July 1984)

153 (+)-o-Terpineol production by microbiological conversion of limonene
GESELLSCHAFT FUER BIOTECHNOLOGISHE FORSCHUNG m.b.H
West Germany 3,243,080 (May 1984)

154 Production of citric acid
SANYO-KOKUSAKU PULP CO LTD
Japan 59 14;792 (January 1984)

155 Preparation of immobilized enzymes
MATSUSHITA ELECTRIC WORKS LTD
Japan 59 48,078 (March 1984)

156 Process for the immobilization of microorganisms on a plastic carrier and its use in biological reactors
SHELL INTERNATIONALE RESEARCH
Europe 112,597 (July 1984)

157 Treatment of microbial cell masses
HOESCHST AG
West Germany 3,308,024 (September 1984)

158 Preparation of immobilized enzymes membranes
OMRON TATEISHI ELECTRONICS CO
Japan 59,48,650 (March 1984)

159 Preparation of immobilized enzyme membranes
OMRON TATEISHI ELECTRONICS CO
Japan 59 48,651 (March 1984)

160 Two-step imbibition process for immobilization of enzymes, hormones, and proteins on porous polymer films and powders
AKZONA INC
Brazil 83 05,158 (May 1984)

161 Crosslinking of immobilized enzymes
TOSHIBA CORP
Japan 59 98,690 (June 1984)

162 Methods ofor immobilization of enzymes
AJINOMOTO CO INC
Japan 59 66,886 (April 1984)

163 Preparation of immobilized enzymes
NITTO ELECTRIC INDUSTRIAL CO LTD
Japan 59 48,079 (March 1984)

164 Preparation of immobilized enzymes
MITSUBISHI PETROCHEMICAL CO LTD
Japan 59,109,175 (June 1984)

165 Preparation of immobilized enzymes
MATSUSHITA ELECTRIC WORKS LTD
Japan 59,109,176 (June 1984)

166 Preparation of immobilized enzymes and microorganisms
SUMITOMO CHEMICAL CO LTD
Japan 59,113,889 (June 1984)

167 Sterilization of enzymes contaminated by bacteria
SNOW BRAND MILK PRODUCTS CO LTD
West Germany 3,410,436 (September 1984)

168 Immobilization of enzymes or microbial cells
MITSUBISHI PETROCHEMICAL CO LTD
Japan 59,140,881 (August 1984)

169 Sterilization of immobilized enzymes
YAKULT HONSHA CO LTD
Japan 59 98,689 (June 1984)

170 Enzyme immobilization
GENERAL RESEARCH LABORATORY FUJI ELECTRIC CO LTD
Japan 59 71,690 (April 1984)

171 Immobilized enzymes
Czech 214,096 (July 1984)

172 Preservation of immobilized lactase
SUMITOMO CHEMICAL CO LTD
Japan 59 88,089 (May 1984)

173 Glucose isomerase
INSTITUTE OF BIOCHEMISTRY
USSR 1,108,107 (August 1984)

174 Immobilization of glucose isomerase-producing microorganisms
TOYO JOZO CO LTD
Japan 59,118,087 (July 1984)

175 B-Galactosidase
KUMIAI CHEMICAL INDUSTRY CO LTD
Japan 59,130,183 (July 1984)

176 β-glucanase by fermentation of fungi
NORSK HYDRO A/S
Wipo 84 02,533 (July 1984)

177 Thermally stable α-amylase
NABISCO BRANDS INC
United States 4,473,645 (September 1984)

178 Continuous production of α-amylase
Czech 214,056 (July 1984)

179 L-Phenylalanine
TANABE SEIYAKU CO LTD
Japan 59 74,994 (April 1984)

180 Fermentative production of L-phenylalanine
AJINOMOTO CO INC
Japan 59 71,698 (April 1984)

181 Fermentative production of L-phenylalanine
AJINOMOTO CO INC
Japan 59,143,596 (August 1984)

182 Fermentative production of L-phenylalanine
AJINOMOTO COINC
Japan 59,132,896 (July 1984)

183 Fermentative production of L-tryrosine
AJINOMOTO CO INC
Japan 59 71,697 (April 1984)

184 L-serine production from glycine
AJINOMOTO CO INC
Japan 59 66,890 (APril 1984)

185 L-threonine production by Escherichia
AJINOMOTO CO INC
Japan 59 66,891 (April 1984)

186 Production of tryptophan
Japan 59,125,892 (July 1984)

187 Microbial production of L-tryptophan
SANRAKU OCEAN CO LTD
Japan 59,140,891 (August 1984)

188 Fermentative production of L-valine
NIPPON KAYAKU CO LTD
Japan 59,143595 (August 1984)

189 L-Lysine production by microorganisms
KYOWA HAKKO KOGYO CO LTD
Japan 59 88,094 (May 1984)

190 Production of L-aspartic acid by immobilized microbe
MITSUBISHI PETROCHEMICAL CO LTD
Japan 59,140,890 (August 1984)

191 L-Glutamic acid yield improvement
AJINOMOTO CO INC
Japan 59 66,892 (April 1984)

192 L-glutamic acid production
KYOWA HAKKO KOGYO CO LTD
Japan 59,113,894 (June 1984)

193 Fermentative production of L-glutamic acid
AJINOMOTO CO INC
Japan 59 71,696 (April 1984)

194 L-Glutamic acid by fermentation and mutant microorganisms for use therein
KYOWA HAKKO KOGYO CO LTD
Europe 117,740 (September 1984)

195 Proline production
AJINOMOTO CO INC
Japan 59 66,893 (April 1984)

196 L-Histidine by fermentation
KYOWA HAKKO KOGYO CO LTD
Europe 117,741 (September 1984)

197 Processing of fermentation liquids containing vitamin B_{12} and other carotenoids
West Germany 3,404,242 (August 1984)

198 Continuous ethyl alcohol production

AGENCY OF INDUSTRIAL SCIENCES AND TECHNOLOGY

Japan 59 85,294 (May1984)

199 Ethanol from fermentable sugar solutions

VOEST ALPINE AG

Europe 114,159 (July 1984)

200 Process for producing ethanol by continuous fermentation of polysaccharide containing raw materials

ALFA LAVAL AKTIEBOLAG

India 152 824

As continuous method of alcohol fermentation from polysaccharide-containing raw materials has been described in IP 152 343. The modification described in this patent consists in first gelatinizing the polysaccharide to a prehydrolysate - which can have different steps of breakdown, say, to dextains, digosaccharides, etc. - and then hydrolyzing this prehydrolysate enzymatically to fermentable sugars.

201 Concentration of alcoholic beverages by reverse osmosis and distillation

AG (PATENTS) LTD

Great Britain 2,134,541 (August 1984)

202 Reduction of the alcohol content of beverages

GALLO E AND J WINERY

United States 4,468,407 (August 1984)

203 Wine stabilization using immobilized phenolic compounds or tannic acid.

Europe 118,990 (September 1984)

204 Preparation of champagne

ALL-UNION CORRESPONDENCE INSTITUTE OF THE FOOD INDUSTRY

Wipo 84 02,348 (June 1984)

INFESTATION CONTROL AND PESTICIDES

205 Disinfectant composition

AGENCY OF INDUSTRIAL SCIENCES AND TECHNOLOGY MINATO SANGYO KK HOKKAIDO SODA CO LTD

Japan 59 59,604 (April 1984)

206 Disinfectant composition containing alkyldimethylbenzoylammonium chlorides

CONSAN PACIFIC INC

Japan 59 59,601 (5th April 1984)

207 Pesticidal formulation

ZOECON CORP

Europe 111,580 (June 1984)

208 Packaging material containing a pesticide

MULTIFOIL (PTV) LTD

France 2,537,095 (June 1984)

209 Liquid pesticide composition in the form of suspension concentrates

HOECHST AG

West Germany 3,240,862 (May 1984)

210 Softening of lubricating oil emulsion pesticides

MITSUBISHI CHEMICAL INDUSTRIES CO LTD

Japan 59,122,408 (July 1984)

211 Microencapsulated liquid pesticide

NITTO ELECTRIC INDUSTRIAL C O LTD

Japan 59 95,928 (June 1984)

212 Pesticidal sheets or containers

Wipo 84 02,447 (July 1984)

213 Use of pyrroloquinazolinediamines as pesticides
SHELL OIL CO
United States 4,451,466 (May 1984)

214 Pesticidal and composition containing benzoylureas
NISSAN CHEMICAL INDUSTRIES LTD
Japan 59 80,603 (May 1984)

215 Improving the activity of a silica sol and treatment of beer with a silica sol.
West Germany 3,304,437 (August 1984)

216 Non-inflammable aerosol insecticide composition
OSAKA AEROSOL INDUSTRY CO LTD
Japan 59 78,101 (May 1984)

217 Aerosols containing insecticides
SUMITOMO CHEMICAL CO LTD
Japan 59 84,802 (May 1984)

218 Aerosols containing insecticides
SUMITOMO CHEMICAL CO LTD
Japan 59 84,801 (May 1984)

219 Alkylphenols as insect repellents
MITSUBISHI CHEMICAL INDUSTRIES CO LTD
Japan 59 78,105 (May 1984)

220 Agent for exterminating insects
ALL-UNION SCIENTIFIC-RESEARCH INSTITUTE OF THE CHEMICAL INDUSTRY
USSR 1,114,387 (September 1984)

221 Insect-repellent composition
STAUFFER CHEMICAL CO
Romania 84,302 (July 1984)

222 Insect repellent composition
STAUFFER CHEMICAL CO
Romania 84,303 (July 1984)

223 Moth-proofing agents
AGENCY OF INDUSTRIAL SCIENCES AND TECHNOLOGY
Japan 59 95,201 (June 1984)

224 Benzenehydroxycarboxamides as fumigant insecticide base materials
CHUGAI PHARMACEUTICAL CO LTD
Japan 59 55,805 (March 1984)

225 Controlled release fungicide composition
HOKKO CHEMICAL INDUSTRY CO LTD
Japan 59 53,401 (March 1984)

226 Synergistic insecticidal compositions
UNION CARBIDE CORP
Canada 1,169,769 (June 1984)

227 Thiadiazole insecticides
CIBA-GEIGY AG
Europe 116,515 (August 1984)

228 Epoxy compounds for stabilization of sulfenylcarbamate insecticides
OTSUKA PHARMACEUTICAL CO LTD
Japan 59 98,006 (June 1984)

229 Insecticidal pyrethroid compositions
AMERICAN CYANAMID CO
United State 4,454,127 (June 1984)

230 Controlling ectoparasites with a pyrethroid and an organophosphorus compound
WELLCOME FOUNDATION LTD
Australia 536,510 (May 1984)

231 Method for the preparation of phosphorus esters of alkylcycloalkyl-5-pyrimidinols

THE DOW CHEMICAL CO

India 153 204

This patent describes a method for the preparation of pyrimidinols from which useful insecticides of the phophotioate type may be easily prepared. The general formulae of these pyrimidinols are given below:

232 A process for the manufacture of zinc dimethyl dithiocarbamate

HINDUSTAN CIBA GEIGY LTD

India 153 029

Zinc dimethyl dithiocarbamate (known commercially as Ziran) of the optimal particulate size is manufactured by the addition of a stoichiometric amount of a solution of zinc sulphate heptahydrate (50%) to a stirred 40% solution of sodium dimethyldithiocarbamate in water, containing a suitable viscosity modifier, and stirring for 1-3 hours. The zinc salt should be added to a mildly acidic solution which has been acidified with e.g. acetic acid. Starch, gum aratic, carboxymethyl cellulose, agar, pectin, etc. may be used as the viscosity modifiers, in amounts of equal to 0.15-1% of the weight of the sodium dimethyl dithiocarmate.

233 A process for the preparation of cyclopropane compounds

SHELL INTERNATIONALE RESEARCH MAATOCHAPPIG BV

India 152 848

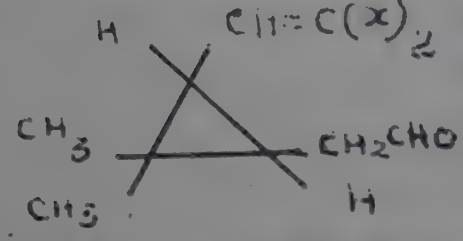
Cyclopropane carboxylate esters, otherwise known as "pyrethroids", have been prepared by a stereospecific route, using as starting material the naturally occurring material (+)-3-carene.

234 A process for the preparation of a 2-(2,2 - dihalorinyl - 3,3-dimethylcyclopropyl)ethanol

SHELL INTERNATIONALE RESEARCH MAATSCHAPPIZ BV

India 152 847

(+)-3-carene has been converted into a compound of the general formula in a stereoisomeric form. This compound is then converted inti a pyrethroid insecticide in the presence of a weak organic acid - such as acetic acid - and of small quantities of a mineral acid, e.g. H_2SO_4 or HCl.



235 A process for the manufacture of a formulation device for dispensing insecticide vapours

AIRWICK AG

India 152 745

A formulation device has been produced for use in, or on, a heating apparatus for dispensing insecticidal vapours. Several different solid compositions, each containing a different active ingredient aare absorbed on a bulk material in juxtaposition . The different active substances may be selected (one each) from the following groups of substances:- (a) pyrethrinoids or isopyrethrinoids; (b) synergistic agents, insect lures, insect repellants, and insecticides like organochlorine compounds. The bulk material may be a cellulosic paper or cardboard, made from wood, cereal, alf-alfa, or cotton fibres, or scrap paper, or asbestos, glass, and polymeric fibres, or baked clays, ointered aluminas, or biscuit porcelain. Tge active substances are impregnated in different zones of the adso-bent, the zones being separated from a polymerisable material. When such a formulation is heated, or ignited, it produced vapours which have a broad range of insecticidal activity.

19

236 Fungicidal composition

SUMITOMO CHEMICAL CO

Europe 111,843 (June 1984)

237 Phosphite-containing fungicide

RHONE-POULENC AGROCHIMIE

West Germany 3,344,433 (June 1984)

238 Frenolicin B as a fungicide

KITASATO INSTITUTE

Japan j 59 78,112

239 Aqueous fungicidal suspensions
SUMITOMO CHEMICAL CO LTD
Japan 59,112,905 (June 1984)

240 Fungicides containing polythylene glycol and trichlorophenol sodium salt.
NIHON NOHYAKU CO LTD
Japan 59 93,009 (May 1984)

241 Fungicide
INSTYTUT PRZMYSLU ORGANICZNEGO
Poland 121,461 (January 1984)

242 Controlled-release fungicidal formulation
LILLY, ELI AND CO
Great Britain 2,135 579 (September 1984)

243 Rodent bait
SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJI BV
Europe 109,697 (May 1984)

244 Agent for chemical sterilization of rodent pests
VEB JENAPHARM
East Germany 207,447 (February 1984)

245 Wood vinegar as a plant growth promoter
CHUGAI PHARMACEUTICAL CO LTD
Japan 59 20,645 (May 1984)

246 Composition for controlling phytopathogenic fungi and bacteria
KITASATO INSTITUTE
DD 208,756 (April 1984)

247 1 - Triacontanol plant growth stimulator formulations
BIOCHEMICAL RESEARCH CORP
United States 4,455,162 (June 1984)

248 Plant growth regulating composition

VEB CHEMIEKOMBINAT BITTERFELD

Belgium 898,801 (May 1984)

WASTE UTILISATION

249 Process and equipment for the extraction of solid material from liquid-containing solids granulated by heat effect, and/or solids the moisture content of which is reducible by heat effect e.g. from colloidal solutions with protein content and fat content, slurries, and suspensions, as well for reducing the fat content of the solid material

RICHTER GEDEON VEGYESGETE GYAR RT

India 152 917

If an effluent containing fat and protein, is heated for a short time (max. 2 mins) to 50-125 C, and the heated material is then allowed to stand for another 5-13 mins. at 50-125 C, then the solids in the effluent granulate, and a part of the fat melts. The granulated solids are separated by filtration in a space containing vapour at 50-125 C within 8-15 mins, and are finally dried. The equipment required for this treatment can be assembled in a block-like, closed unit occupying little space, and excluding any risk of contamination. It is very useful in treating wastes from slaughterhouses, and from splitting and gut-cleaning plants.

I N D E X

Aerated water
dispersing machine 102
ion exchange treatment 103
Aerosols
insecticide containing 216-8
Alcoholic beverages
concentration 201
reduction of alcohol content 202
Alkyl phenols
pesticide
Amylase
determination 22-23
production 178
thermally stable 177
Amylase activity
measurement 15
Anthroquinone
food colouring 43
Antibiotic
milk, detection, enzyme
immuno assay 90
Antioxidant
for coating 40-1
fat and oil 113
Aroma
improvement of aroma 45
soy sauce 135
Aspartic acid
microbial production 190 -
Benzoylurea
pesticide 214
Beverage
non-carbonated, filling 104
whey 96
Biocatalylic reactor 147
Bread
enrichment with soybean protein 80
Butylated hydroxyanisole 54
Cake mix
liquid composition 81
Calcium salt
production bran whey 94
Candies
with jelly filling 77
Canned
fish, quality improvement 100
Carbamates
insecticide 228,232
Carbohydrate
in Dairy product, determination 83
Carboxylase
purification 20
Carotenoid
pigment 44
Centriguge
controlling torque transmission 2
Cereal
germ extracts 57
quality determination 56
Champagne
preparation 204
Cheese a
additive 91
soyabean cheese substitute 92
Cholesterol
low-cholesterol foods 140
Chromatography
enzyme, separation 17
Citric acid
production 154
Coagulation
milk, acid method
Coating
confectionary 72
Coffee
decaffeination 107-9
Coffee whitener
protein-free 106
Cold storage
removal of harmful impurities in
cooling chambers 7
Colouring substance 42-4
Condiment 133-4
Confectionary
coating 72
Cooked
rice, preservation 58
Cooker
portable gas cooker 1
Cooking
oil regeneration 115
Dairy product
carbohydrate determination 83
Decaffeination
coffee 107-9
Dicalcium phosphate
from rock phosphate 37

Dipeptide sweetener 49
Disinfectant 205-6
Dithiolone
from aroma improvement 45
Dough
additive mixture for adhesion decrease 79
Drying
fish, vegetables & fruit 6
maize 4
spherical foods 5
Effluent
utilisation 249
Electro-optical analyser
for milk analysis 86
Enzyme
chromatographic separation 17
dehydrogenase determination 18
immobilised 148, 155, 158-66, 168-72
preparation 16
sterilisation 167
Enzyme activity
measurement 19
Ethyl alcohol
fermentative production 198-200
Fat
milk 85-6
Fat and oil
composition 112, 114
antioxidant 113
increasing phytosterol content 120
increasing polyunsaturated fatty acids 123
wheat germ oil 60
Fat emulsion 124-7
Fatty acid
polyunsaturated, increase in fat and oil 123
unsaturated, hydrogenation 121-2
Fermentation
ethyl alcohol, production 198-200
glucanase production 176
glutamic acid, production 191-4
histidine, production 196
liquid containing vitamin B12, processing 197
phenylalanine, production 179-82
polysaccharide production 74
Fermentation
tyrosine, production 183
valine, production 188
Fish
canned, quality improvement 100
drying 6
paste, quality improvement 101
Flavouring substance 46-8
Flour
wheat 61
Food emulsion
dietetic
Food supplement concentrate 139
Frenolicin B
fungicide 238
Fructose
from sorbitol 76
Fruits
drying 6
Fruits and vegetables
protection agent for 66
storage 67
Fruit juice powder
palatinose containing 105
Frying oil
regenerating agent 132
Fungicide 225, 236-42
Galactosidase 175
Gliadine
production *from* wheat protein 59
Glucanase
fermentative production 176
Glucose
isomerisation 69
Glucose isomerase 173-4
Glucose oxidase
isolation and purification 25
Glutamic acid
fermentative production 191-4
Heating
milk 88
Histidine
fermentative production 197
Honey
powder 71
Immobilisation
enzyme 148, 155, 158-66, 168-72
glucose isomerase-producing organisms 174

Immobilisation
microorganisms 156
Insecticide 216-24, 226-35
Intermediate moisture food
preservation 8
Lactase
immobilised, preservation
Lactic acid
microbial production 152
Lactose
milk 86
whey extraction 93
Lipase
determination 27
microbial, pigment removal 149
Lipase activity
determination 26
Lysine
microbial production 189
Maize
drying 4
Maltose
/ starch 70
Margarine
fatty base for 128
Meat
freshness determination 97-8
preservation 99
Meat substitute 143
Microbial cell mass
treatment 157
Microbial infection
control 246
Microbial lipase
pigment removal 149
Microbial production
aspartic acid 190
lactic acid 152
lysine 189
terpeneol 153
threonine 185
tryptophan 186-7
Microbial protein isolate 146
Microbiological tests 150
Microorganism
immobilisation 156
Milk
analysis 87
antibiotic, detection, enzyme
immuno assay 90
coagulation, acid method 89
fat, protein and lactose 86
Milk
fat and protein content 85
heating 88
preservative 84
Monocalcium phosphate 53
Monoglyceride 78
Noodle
Ageing control 82
Oil
cooking oil regeneration 115
Oilseed
extraction 62, 117-9
protein 63-4
Oligosaccharide
purification 73
Oxidation indicator inks
for food preservation 3
Packaging
containing pesticide 208
food
thermoplastic container 12
wrapper, cellulose containing 11
Palm oil
refining 131
Patulin
determination 14
Peppermint oil
with reduced menthofuran content
136
Peroxidase
purification 21
Pesticide 207-14
liquid emulsion 209-10
microencapsulated 211
sheets 212
Phenylalanine
fermentative production
179-82
Phosphate
alkaline, isoenzyme, determination
30
Phosphatide
hydrophillic, determination in
vegetable oil 130
Phospholipid
production 129
Pickled
vegetables 68
Plant growth substance 247-8
wood vinegar 245
Polysaccharide
fermentative production 74

Polysaccharide
separation 75
Preservative 38-9
milk 84
Printing
printing indicia on objects, apparatus for 10
Proline
production 196
Protein
composition 141
milk 85-6
microbial protein 146
oilseed 63-4
protein-sugar foam 32
soybean *for* bread enrichment 80
soybean, phosphorylated 145
vegetable, recovery and treatment 142
vegetable, treatment 144
wheat, gliadin production 59
whey, extraction 93
Protease activity
alkaline, determination 29
Proteinase inhibitor 24
Pyrethroid composition
insecticide 229-30
Pyrimidinol
insecticide 231
Refining
palm oil 131
Rice
cooked, preservation 58
Rodent bait 243
Rodenticide 234
Salmonella
food, testing 151
Salt substitute
low-sodium 33-4
Serine
production from glycine 184
Sodium alginate from algae 36
Sorbitol 51-2
Soybean
cheese substitute 92
deodourisation 65
protein *for* bread enrichment 80
protein phosphorylates 145
Soy sauce
aroma 135
Starch
maltose, preparation 70
Stevioside
sweetening substance 50
Sweetening substance 49-50
Table salt
balanced sodium and potassium 35
Tea
pelleting 111
prill making equipment 110
Terpeneol
microbial production 153
Thermoplastic container 12
Thiadiazole 227
Threonine
microbial production 185
Transaminase
determination 28
Triacontanol
plant growth substance 247
Tryptophan
microbial production 186-7
Tyrosine
fermentative production 183
Unsaturated fatty acid
hydrogenation 121-2
Valine
fermentative production 188
Vegetable oil
extraction 116-9
hydrophillic phosphatide determination 130
Vegetable protein
recovery and treatment 142
treatment 144
drying 6
pickled 68
Vinegar
production 137
wood vinegar as plant growth substance 245
Vitamin K
preparation 55
Vitamin K 1
determination 31
Wheat
flour 61
germ oil
protein, gliadin production 59
Whey
beverage 96
calcium salts production 94
protein and lactose extraction 93
treatment process
Wine
stabilisation 203

Printed by Offset at CFTRI Press, Mysore 570 013.

STATEMENT ABOUT "FOOD PATENTS"

FORM IV

Under Rule 8 of the Registration of Newspapers (Central Rules 1956)

(See Rule 8)

1.	Place of Publication	: MYSORE
2.	Periodicity of its publication	: Quarterly
3.	Printer's Name	: B.L.AMLA
	Nationality	: INDIAN
	Address	: DIRECTOR CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE MYSORE 570 013
4.	Publisher's Name	: B.L.AMLA
	Nationality	: INDIAN
	Address	: DIRECTOR CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE MYSORE 570 013
5.	Editor's Name	: S.V.SANGAMESWARAN
	Nationality	: INDIAN
	Address	: CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE MYSORE 570 013
6.	Names and addresses of individuals who own the newspaper and partners or shareholders holding more than one percent of the total capital	: DIRECTOR CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE MYSORE 570 013

I, B.L. Amla, hereby declare that the particulars given above are true to the best of my knowledge and belief.

(B.L.AMLA)
PUBLISHER

Regd. No. 36730/84

Printed and Published by Dr. B. L. Amla, Director, Central Food Technological Research Institute, Mysore 570 013 at C.F.T.R.I. Offset Printing Unit. Editor : Shri S. V. Sangameswaran, C.F.T.R.I. Mysore

Vol. 7 No. 2

April- June 1985

FOOD PATENTS

ISSN 0253 - 4916

Central Food Technological
Research Institute, Mysore – 570 013
(C.S.I.R., India)

National Information System for
Science and Technology
Dept. of Science and Technology

FOOD PATENTS

Vol. 7 No. 2

April- June1985

National Information Centre for Food Science and Technology
Central Food Technological Research Institute,
Mysore — 570 013, India

Annual Subn.:Rs.15.00 $10.00 Single copy: Rs.5.00

CONTENTS

ENGINEERING AND EQUIPMENT ... 35

PRESERVATION AND PACKAGING ... 36

CHEMISTRY AND ANALYSIS ... 37

FOOD ADDITIVES ... 41

CEREALS AND MILLETS ... 42

PULSES, OILSEEDS AND NUTS ... 44

TUBERS, VEGETABLES AND FRUITS ... 45

SUGAR, STARCH AND CONFECTIONERY ... 45

BAKERY PRODUCTS .. 46

MILK AND DAIRY PRODUCTS ... 47

MEAT, FISH AND POULTRY ... 48

FRUIT JUICES AND SOFT BEVERAGES ... 49

FATS AND OILS ... 51

SPICES AND CONDIMENTS ... 52

DIETETIC AND PROTEIN FOODS ... 53

MICROBIOLOGY AND FERMENTATION (including Alcoholic Beverages) ... 55

INFESTATION CONTROL AND PESTICIDES ... 58

WASTE UTILISATION ... 62

ENGINEERING AND EQUIPMENT

250 An improved apparatus for forming and over-wrapping batches of products

GD SOCIETA PER AZIONI

India 152 850 (April 1984)

The apparatus places side by side, and in alignment, previously wrapped products fed to it in succession and forms the products into batches, each of which is made up of the required number of contiguous products The batches so formed are then sent to a mechanism that overwraps them. Such packs are commonly known as "sticks". They are particularly useful for confectionery and pharmaceutical products.

251 An apparatus for conditioning leaf material and a plant incorporating the same.

HAMBRO MACHINERY LTD

India 152 721 (March 1984)

This conditioning apparatus has a conditioning chamber arranged over a gas distribution means, and a means to supply gas to the said chamber. The gas distribution means is an apertured plate having a mesh arranged on the gaseous medium supply side. When the machine is in use, the leaf material to be conditioned is maintained in a fluidised state. The machine is useful for drying or cooling material like tea or tobacco.

252 Device for separating a filler into solids and liquid, particularly for viscous sugar filler into sugar crystals and molasses

HEIN

India 153 314 (June 1984)

The device consists of a dosing device for feeding the filler - i.e. a mixture of sugar crystals and molasses - into a centrifuge, and a device for heating the filler immediately prior to hydro-extraction. The heating is achieved by means of a micro-wave heater. The filler absorbs energy as a dielectric, and thereby is heated very rapidly; what is more, only the liquid is heated and not the solids, so that a very low proportion of the sugar is dissolved, in spite of heating.

253 Apparatus for heat recovery in an extraction apparatus

HANOTKE KD

East Germany 209, 744 (May 1984)

254 A spray drier

STAINCO ENTERPRISES PVT LTD

India 153 418 (July 1984)

The apparatus consists of a tower having means for introduction of the feedstock and drying fluid, such that the drying fluid causes an atomization and drying of the feedstock. The feedstock is fed in through one atomization or more nozzles which are not under high pressure. The angle of the feedstock jet and the diamteter of the nozzle orifice would vary from one feedstock to another. Similarly, the velocity and pressure of the working fluid would depend on the feedstock. A primary and a secondary cyclone separator are connected to the upper part and base of the tower respectively. (See also IP 153 419)

255 A process for spray-drying of a feedstock

STAINCO ENTERPRISES PVT LTD

India 153 419 (July 1984)

The new process for spray-drying of a feedstock in the form of a suspension, paste, or emulsion, consists in atomizing and drying the feedstock with the same drying fluid. The feedstock and drying fluid are fed simultaneously into a tower where the atomized feedstock has a co-current and a counter-current flow in relation to the drying fluid. Secondary air (consisting of room air) is also introduced into the tower. Secondary cyclone separators are provided, to recycle the atomized feedstock into a selected zone of the tower, to impurt the required moisture content to the atomized feedstock. Then the atomized feedstock with the required moistures content is discharged into a primary cyclone separator. (See also IP 153 418).

256 Improvements in or relating to sprayers for insecticides and other liquids

PANDIT (SD)

India 153 248 (June 1984)

The essential feature of this sprayer is that it has a air-blower instead of an air pump which is normally found in conventional sprayers. It can spray not only insecticides, but also paints, lacquers, or other coating compositions, perfumes, wetting agents, water , etc.

257 Apparatus and process for the preparation of acid caseinates

CAITERIE TRIBALLAT SA

Europe 112, 241 (June 1984)

PRESERVATION AND PACKAGING

258 Acid preservation systems for food products

LIPTON

United States 4,477,478 (October 1984)

259 A method for the sterilization of surface or liquids, and surfaces thus sterilized

NATIONAL RESEARCH DEVELOPMENT CORPORATION

India 153 503 (July 1984)

The surface of food packaging materials can be sterilized by treating it with a hydrogen peroxide solution (preferably 0.25% by weight) that has been irradiated with UV rays having a wave-length of about 200 nm. Micro-organisms on the packaging material are rendered non-viable by the synergism between H_2O_2 and UV-radiation

260 Prevention of brown coloring of cooked food materials

DAIEI YAKUHIN KOGYO KK

Japan 59,140 838

261 Closures for containers for wine or wine-based products

METAL BOX LTD

India 153 890 (August 1984)

A stopper made of thermoplastic material, and having a closed-cell foamed core within a liquid impervious skin, has been designed for closing wine bottles. It is made from an ethylene/vinyl acetate copolymer having a vinyl acetate content of 10-20%. The degree of foaming of the moulded stopper, measured in terms of the reduction of density - as compared with the unfoamed material - is 45 to 70%. Such a stopper has the desirable properties of natural cork - viz., compressibility, resilience, a good grip in the neck of the bottle - but does not deteriorate when it comes in contact with wine or SO_2

262 Color indicators for moisture detection in packaged foods

SHIN NISSO KAKO CO LTD

Japan 59, 157 565 (September 1984)

CHEMISTRY AND ANALYSIS

263 Method and apparatus for recovering lactic acid from crude solutions

JOACHIN G

East Germany 206 373 (January 1984)

264 Lactic acid

LENINGRAD INTER DEPARTMENTAL SCIENTIFIC RESEARCH INSTITUTE OF THE FOOD INDUSTRY

USSR 1 113 409 (September 1984)

265 Optically active amino acids by enzymic synthesis
FABRE, PIERRE SA
France 2 540 515 (August 1984)

266 Production of L-α- amino acids
MITSUBISHI GAS CHEMICAL CO INC
Japan 59 159 789 (September 1984)

267 L-Aspartic acid
TANABE SEIYAKU CO LTD
Europe 123 903 (November 1984)

268 Production of L-proline
TANABE SEIYAKU CO LTD
Japan 59 162 895 (September 1984)

269 Preparation of stable enzyme preparations
HITACHI CHEMICAL CO LTD
Japan 59 166 084 (September 1984)

270 Enzyme stabilization
DUSKIN FRANCHISE CO LTD
Japan 59 169 491 (September 1984)

271 Preparation of polymer membrane containing immobilized enzymes
FUJI ELECTRIC RESEARCH LABORATORY
Japan 59 164 953 (September 1984)

272 Immobilized enzyme
MATSUSHITA ELECTRIC INDUSTRIAL CO LTD
Japan 59 146 587 (August 1984)

273 Preparation of membranes for immobilization of enzymes
KANEBO SYNTHETIC FIBERS, LTD
Japan 59 159 783 (September 1984)

274 Immobilization and separation of enzymes
LASOVSKY J
Czech 206 060 (May 1984)

275 Immobilization of enzymes
FUJI ELECTRIC RESEARCH LABORATORY
Japan 59 173 081 (September 1984)

276 Recovering and purifying proteins, especially enzymes
AKADEMIE DER WISSENSCHAFTEN DER DDR
East Germany 160 927 (June 1984)

277 Determining substrate or enzymic activity
WAKO PURE CHEMICAL INDUSTRIES LTD
Europe 121 254 (October 1984)

278 Determination of enzyme activity
ORIENTAL YEAST CO LTD
Japan 59 159 796 (September 1984)

279 Method for recovery of cellulase
AGENCY OF INDUSTRIAL SCIENCES AND TECHNOLOGY
Japan 59 173 079 (September 1984)

280 Isolation of acid protease
KIKKOMAN CORP
Japan 59 169 490 (September 1984)

281 Measuring acid and alkaline phosphatase activities
AGENCY OF INDUSTRIAL SCIEN CES AND TECHNOLOGY
Japan 59 143 600 (August 1984)

282 Manufacture of glucoamylase
AMANO PHARMACEUTICAL CO LTD
Japan 59 162 878 (September 1984)

283 An agrose gel electrophoresis technique for the determination of amylase isozymes
RUSH PREBYTERIAN ST. LUKE'S MEDICAL CENTER
Europe 122 742 (October 1984)

284 Chromogenous starch for detection of α-amylase isoenzymes
Czech 224 156 (July 1984)

285 Calibration of an amylase determination system
FUJI ELECTRIC CO LTD
Japan 59 163 553 (September 1984)

286 Maltogenic amylase enzyme product, and its use.
MOVO INDUSTRI A/S
Europe. 120 693 (October 1984)

287 Reagents for glutamate-oxaloacetate transaminase determination
HITACHI CHEMICAL CO LTD
Japan 59 175 898 (October 1984)

288 Pyruvate oxidase purification and use for determination of pyruvate and enzymes
BOEHRINGER MANNHEIM G.m.b.H.
West Germany 3 306 719 (August 1984)

289 Reagents for glutamate pyruvate transaminase determination
HITACHI CHEMICAL CO LTD
Japan 59 175 899 (October 1984)

290 Method for stabilization of lipase
NIPPON OILS AND FATS CO LTD
Japan 59 173 080 (September 1984)

291 Purification of dextrasucrase
SOCIETE NATIONALE ELF AQUITAINE SA
Europe 125 981 (November 1984)

292 Determination of methyl N-benzyloxycarbonyl-L-phenylalanine-L-aspartate
JANICK F AND OTHERS
Czech 206 847 (February 1984)

293 Determination of isocitrate dehydrogenase
HITACHI LTD
Japan 59 183 699 (October 1984)

294 Composition, analytical element and method for the quantification of creatine kinase
EASTMAN KODAK CO
Europe 116 307 (August 1984)

FOOD ADDITIVES

295 Reagent for maintaining food freshness
AGENCY OF INDUSTRIAL SCIENCES AND TECHNOLOGY MINATO SANGYO KK
Japan 59 146 578 (August 1984)

296 Food preservative composition
TOPPAN PRINTING CO LTD
Japan 59 159 764 (September 1984)

297 Food antioxidants from sesame
TAKEMOTO OIL AND FAT CO LTD
Japan 59 157 173 (September 1984)

298 Tannins as food antioxidants
OSAKA YAKUHIN KENKYUSHO KK
Japan 59 166 585 (September 1984)

299 Food emulsifiers
RIKEN VITAMIN CO LTD
Japan 59 139 921 (August 1984)

300 Stable food thickener composition
NAKANO VINEGAR CO LTD
Japan 59 156 253 (September 1984)

301 Natural aroma and flavour extracts
HASEGAWA T CO LTD
Japan 59 140 857 (August 1984)

302 Oil-soluble natural flavour materials
HASEGASA T CO LTD
Japan 59 169 464 (September 1984)

303 Stable dipeptide sweetener crystals and tablets containing the crystal
AJINOMOTO CO INC
Europe 119 837 (September 1984)

304 Stabilization of aspartame in liquid foods
AJINOMOTO CO INC
Japan 59 173 066 (September 1984)

305 Agglomerating aspartame sweetened products with dextrins
GENERAL FOODS CORP
Europe 109 771 (May 1984)

306 Cyclodextrin for stabilization of effervescent aspartame tablets
AJINOMOTO CO INC
Japan 59 166 057 (September 1984)

307 Enhanced-solubility aspartame compounds
SEARLE GD AND CO
Europe 109 685 (May 1984)

308 Sweetener composition
TAKEDA CHEMICAL INDUSTRIES LTD
Japan 59 154 957 (September 1984)

309 Iron food additives
MEIJI SEIKA KAISHA, LTD
Japan 59 162 843 (September 1984)

310 Gelatinized fat-soluble vitamin additives
MORINAGA CONFECTIONERY CO LTD
Japan 59 173 053 (September 1984)

311 Flavour improvement of potassium chloride salt substitutes
HORIUCHI ITARO CO LTD
Japan 59 154 958 (September 1984)

CEREALS AND MILLETS

312 An equipment for cleaning grains, seeds, or the like
THERMAX PVT LTD
India 153 440 (July 1984)

The equipment which is claimed to be compact, sturdy and durable, noiseless, dust-free, smooth in operation, and very effective in cleaning consists of (i) a hollow frame or body preferably L-shaped, and containing a feeding chamber, which is a hopper with a screw conveyor, and a fluted roller; (ii) a filtering chamber which may be a perforated, or wire-mesh, rotating cylinder; (iii) an aspiration chamber which has an inlet provided with a damper, an outlet, and at least one induced draft fan;

(iv) a screening chamber which has inclined, perforated screen that can be vibrated; and (v) a prime mover, e.g. one or two, electric motors. (See also IP 153 517)

313 An equipment for cleaning and grading grains, seeds or the like

THERMAX PVT LTD

India 153 517 (July 1984)

The equipment comprises: (i) a hollow body, or frame containing a feeding chamber or zone; (ii) a funnel shaped pre-aspiration chamber below the said feeding chamber; (iii) a grading chamber containing atleast two perforated screens, below the pre-aspiration chamber; (iv) an aspiration, having at least one induced draft fan, chamber adjoining the pre-aspiration chamber; and (v) a prime mover. If necessary, a filtering chamber or zone may be introduced between the feeding chamber and the pre-aspiration chamber. (See also IP 153 440)

314 Grain moisture testing apparatus

STEELE DE

India 153 406 (July 1984)

The apparatus consists of a holder in which grain is kept under crushing compression and two electrodes each with a contact face touching the crushed grain. The conductance of the grain sample is measured, and a voltmeter indicates whether the conductance (or moisture content) of the grain lies within the specified limits.

315 Grain polishing and whitening machine

SALETE GARCES

India 153 368 (July 1984)

The invention relates particularly to a machine for polishing and whitening rice, which is capable of dehusking a large proportion of unhusked grains, as well as of polishing and whitening the said rice grains in one single step. It consists of a base box containing the drive, a vertical hollow rotor, a screw-conveyor to push the rice grain from the inlet, and upwards through the rotor into the treating chamber, a number of radial bores to allow air to flow through the grain in the treating chamber and a grain outlet. The screw conveyor is provided with a helical rib lined with an abrasive layer, at least on its forward surface. The rotor has two longitudinal, diametrically opposed, tangentially mounted, adjustable, diagonally fluted, and removable knives. The flutes of the knives cause the grain to flow in a direction opposite to the flow of grain produced by the screw-conveyor. Thus, the grains in the compacted grain mass rub against one another, and a very efficient dehusking and polishing are achieved.

316 A machine for making puffed rice

SUBRATA DAS

United States 4 477 386 (October 1984)

The machine consists of:- (i) two drum-shaped chamber, the layer one being the roasting puffing chamber; (ii) means for revolving the drums; (iii) arrangement for heating the drums; (iv) a lever which adjusts the opening of a window on the lid of the roasting chamber, allowing a small amount of rice inside it to come out at every revolution; (v) a channel through which rice from the roasting chamber can enter the puffing chamber (vi) a frame on which the two chambers can be mounted in an inclined position, the roasting chamber being at a higher level, and (vii)a heat-insulating enclosure around the chamber and heat source to reduce loss of heat.

317 Rice cracker quality improvement with cyclodextrins

KANEGAFUCHI CHEMICAL INDUSTRY CO LTD

United States 4 477 386 (October 1984)

318 Oil from rice embryo-buds

FUJITA K

United States 4 477 386 (October 1984)

PULSES, OILSEEDS AND NUTS

319 Food Product based on soybean glycosides

HAYASHIBARA BIOCHEMICAL LABORATORES INC

France 2, 542 318 (September 1984)

320 Odorless soybean protein production

KIBUN CO LTD

Japan 59 39 106 (September 1984)

321 Decreasing the content of a trypsin inhibitor in soybeans

ODESSA TECHNOLOGICAL INSTITUTE OF THE FOOD INDUSTRY

USSR 1 118 334 (October 1984)

322 Defatted and debittered soybean meal

CORNELL RESEARCH FOUNDATION INC

Great Britain 2 136 667 (September 1984)

FRUITS AND VEGETABLES

323 Prevention of discoloration of vegetables and fruits
DAIEI SHOKUHIN KOGYO KK
Japan 59 140 832 (August 1984)

324 Process for preservation of green color in canned vegetables
CONTINENTAL PACKAGING CO INC
Europe 112 178 (June 1984)

325 Organoleptic properties of canned green vegetables
CONTINENTAL GROUP INC
United States 4 478 860 (October 1984)

326 Extraction of oil from avocado fruit
CURIEL M
Brazil 84 00 522 (September 1984)

SUGAR, STARCH AND CONFECTIONERY

327 Noncrystalline sugar powder
WAKODO CO LTD
Japan 59 173 099 (September 1984)

328 Manufacture of cellulose
AGENCY OF INDUSTRIAL SCIENCES AND TECHNOLOGY
Japan 59 166 081 (September 1984)

329 Manufacture of cellulose
AGENCY OF INDUSTRIAL SCIENCES AND TECHNOLOGY
Japan 59 166 083 (September 1984)

330 Saccharifying cellulose
UNITED STATES DEPT OF ENERGY
United States 494 482 (September 1984)

331 Manufacture of glucocellulose
AGENCY OF INDUSTRIAL SCIENCES AND TECHNOLOGY
Japan 59 166 082 (September 1984)

332 Modification of pectin from sugar beets, their products and use

INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE

Europe 124 439 (November 1984)

333 Production of sucrose fatty acid esters of high HBL values

DAIICHI KOGYO SEIYAKU CO LTD

Japan 59 78 200 (May 1984)

334 Saccharification of starches

KYOWA HAKKO KOGYO CO LTD

Japan 59 179 093 (October 1984)

335 Method for converting starch hydrolysate to dextrose-containing syrup using glucoamylase immobilised on porous alumina

CPC INTERNATIONAL INC

India 153 842 (August 1984)

A process which does not require a chemical reaction to immobilize the gluco-amylase on the support has been discovered. The gluco-amylase is first adsorbed on porous alumina. The resulting enzyme composite is then contacted with a starch hydrolysate which has been treated with ion-exchange resin, until it contains less than 0.1% ash on dry weight basis. The treated enzyme is separated from the enzyme composite, and the dextrose product is recovered from the treated hydrolysate. The immobilized enzyme shows a long useful life at temperatures of 60 C and is not eluted from the carrier. Furthermore, a starch hydrolysate may be passed through the immobilized enzyme in a plug-flow-reactor, at a practical rate of flow.

BAKERY PRODUCTS

336 Shortening for bakery products

TAIYO CHEMICAL CO LTD

Japan 59 166 036 (September 1984)

337 Improvement of bread quality

KANEGAFUCHI CHEMICAL INDUSTRY CO LTD

Japan 59 175 844 (October 1984)

338 Dough-improving additive for breadmaking
MAURI BROTHERS AND THOMSON PVT LTD
West Germany 3 319 942 (December 1984)

339 Liquid dough conditioners
EASTMAN KODAK CO
United States 4 477 479 (October 1984)

340 Sugarless cake mix composition
RIKEN NOSAN KOKO CO LTD
Japan 59 143 542 (August 1984)

341 Improved yeast strains and their use in baking
UNIVERSAL FOODS CORP
Europe 128 524 (December 1984)

MILK AND DAIRY PRODUCTS

342 Gelled milk compositions
GENERAL FOODS CORP
United States 4 479 973 (October 1984)

343 Device and methods for hydrolysis of milk sugar in whey
ROEHM G.m.b.H.
West Germany 3 310 430 (September 1984)

344 Cheese starter media and method for its manufacture
MID-AMERICA DAIRYMEN INC
Wipo 84 04 107. (October 1984)

345 Mayonnaise-like and cream cheese-like food material
TAIYO YUSHI CO LTD
Japan 59 146 555 (August 1984)

346 A process for the preparation of a precipitate of casein and whey protein.
STICHTING NEDERLANDS INSTITUT VOOR ZUIVELONDERZOEK
Europe 115 651 (August 1984)

347 Fatty acid-acylated casein
NIPPON SHINYAKU CO LTD
Japan 59 155 396 (September 1984)

348 Production of casein phosphopeptides
MEIJI SEIKA KAISHA LTD
Japan 59 159 793 (September 1984)

349 Production of casein phosphopeptides for food use
MEIJI SEIKA KAISHA LTD
Japan 59 159 792 (September 1984)

350 Process for making a freeze-thaw stable edible foam containing milk fat
GENERAL FOODS CORP
Europe 113, 536 (July 1984)

MEAT, FISH AND POULTRY

351 Apparatus for analyzing quantitative content of the constituents of meat
KARTRIDG PAK CO
West Germany 3 407 447 (October 1984)

352 Agents for preventing meat discoloration
TAKEDA CHEMICAL INDUSTRIES LTD
Japan 59 173 068 (September 1984)

353 Hot-melt adhesives for meat packaging and other low temperature applications
EASTMAN KODAK CO
United States 4 471 086 (September 1948)

354 Improvement of fish paste products
SEIWA KASEI KK
Japan 59 140 863 (August 1984)

355 Coloring agents for roasted fish paste products
KOTANI A
Japan 59 140 862 (August 1984)

356 Colour improvement of fried or roasted fish paste products
KODANI A
Japan 59 175 865 (October 1984)

357 Color improvement of fried or roasted fish paste products with sorbose
KODANI A
Japan 59 175 866 (October 1984)

358 Reducing the energy content of sausages
BEB WISSENSCHAFTLICH TECHNISCHES ZENTRUM DER ZELLSTOFF UND PAPIERINDUSTRIE
East Germany 211 709 (July 1984)

FRUIT JUICES AND SOFT BEVERAGES

359 Enzymic treatment of predejuice mash
NOVO INDUSTRI A/S
Great Britain 2 139 471 (November 1984)

360 Flavor improvement for beverages
Switz 498 931 (November 1970)

361 Preservative for drinks
FLOCH L
Czech 224 180 (July 1984)

362 Amino acids as dry beverage mix ingredients
GENERAL FOODS CORP
United States 4 479 974 (October 1984)

363 Emulsions of essential oils for citrus beverages
YISSUM RESEARCH DEVELOPMENT CO
Israel 58 111 (April 1984)

364 Citrus juice concentrate
PROCTER AND GAMBLE CO
Europe 110 638 (June 1984)

365 Orange juice concentrate
PROCTER AND GAMBLE CO
United States 4 374 865 (February 1983)

366 Decaffeination
GENERAL FOODS CORP
United States 4 472 442 (September 1984)

367 Decaffeination process
KORD BETEILIGUNGSGESELLSCHAFT m.b.H. und CO
West Germany 3 313 339 (October 1984)

368 Decaffeination with treated activated carbon
GENERAL FOODS CORP
United States 4 481 223 (November 1984)

369 Decaffeinating green coffee beans with active carbon
DOUWE EGBERTS KONINKLIJKE TABAKSFABRIET-KOFFIEBRANDERIJEN-THEEHANDEL BV
Europe 111 375 (June 1984)

370 Production of mutagen-free coffee extracts
ADVANCE KAIHATSU KENKYUSHO KK
Japan 59 156 243 (September 1984)

371 Filter materials to remove mutagens from coffee extracts
ADVANCE KAIHATSU KENKYUSHO KK
Japan 59 156 244 (September 1984)

372 Coffee whitener
HOECHST AG
West Germany 313 644 (October 1984)

373 Cocoa drink production
MEIJI SEIKA KAISHA LTD
Japan 59 169 452 (September 1984)

FATS AND OILS

374 Fat compositions

KAO CORP

Japan 59 166 561 (September 1984)

375 Fat having butter-like properties and a reduced tendency to develop graininess

UNILEVER NV

Europe 121 948 (October 1984)

376 Recovery of extraction vapor from the oil extraction industry air-gas mixtures

KRASNODAR POLYTECHNIC INSTITUTE

USSR 1 112 048 (September 1984)

377 Selective reduction of edible fats and oils, platinum and palladium on titania

UOP CORP

United State 4 479 902 (October 1984)

378 Production of lecithin-rich oils

NAGAHAMA A

Japan 59 157 193 (September 1984)

379 High-cholesterol oils and fats

QP CORP

Japan 59 140 299 (August 1984)

380 Low-fat, spread and process

STANDARD BRANDS INC

Canada 1 170 498 (July 1984)

381 Oil and fat composition for cake production

KAO CORP

Japan 59 143 559 (August 1984)

382 Removing impurities from triglyceride oils
UNILEVER PLC
Europe 122 727 (October 1984)

383 Deodorization of triglyceride oil
UNILEVER PLC
Europe 127 982 (December 1984)

384 Process and apparatus for the interesterification of a triglyceride oil
UNILEVER PLC
Europe 121 440 (October 1984)

385 Water-oil-water emulsion as a low-calorie food
MEIJI MILK PRODUCTS CO LTD
Japan 59 169 531 (September 1984)

386 Water-oil-water emulsion as low-calorie food
MEIJI MILK PRODUCTS CO LTD
Japan 59 173 131 (October 1984)

387 Enzymic degradation of lipids
AGENCY OF INDUSTRIAL SCIENCE AND TECHNOLOGY
Japan 59 179 091 (October 1984)

388 A process for manufacture of esters of castor oil fatty acids directly from castor seeds
BHATNAGAR S
India 153 357 (July 1984)

Esters of castor oil fatty acids are produced by first extracting the seeds with methanol or ethanol, at room temperature and pressure, and treating the alcoholic miscella so obtained with an inter-esterification catalyst such as alcoholates, hydroxides, or carbonates of K_1 Na, or Li neutralizing the catalyst with phosphoric or acetic acid and finally distilling off the unreacted alcohol.

SPICES AND CONDIMENTS

389 Extraction of antioxidants from spices
HOUSE FOOD INDUSTRIAL CO LTD
Japan 59 176 384 (October 1984)

390 Extraction of antioxidants from spices
HOUSE FOOD INDUSTRIAL CO LTD
Japan 59 176 385 (October 1984)

391 Masking bitter taste of mustard paste
QP CORP
Japan 59 143 562 (August 1984)

392 Sweetening astringent persimmons
NIPPON LIGHT METAL CO LTD
Japan 59 153 547 (August 1984)

DIETETIC AND PROTEIN FOODS

393 Production of health beverage from fruits and honey
ITO JINBEEMON SHOTEN KK
Japan 59 156 278 (September 1984)

394 Protein-enriched drink
HOECHEST AG
West Germany 3 314 428 (October 1984)

395 Raw material for increasing the proportion of protein in foods while preserving their organoleptic properties
CENTRALE LAITIERE DE HAUTE NORMANDIE
France 2 541 868 (September 1984)

396 Recovery of protein using shear
HANKEL CORP
United States 4 486 312 (December 1984)

397 Protein-containing foods or feeds
MOLKEREIGENOSSENSCHAFT ST JOHANN IT
Austria 376 549 (November 1984)

398 Protein-containing foods by fermentation
RANKS HOVIS McDOUGALL PLC
France 2 542 976 (September 1984)

399 Proteins from plant materials
ADADEMIE DER WISSENSCHAFTEN DER DDR
East Germany 212 415 (August 1984)

400 Protein flakes
WAKODO CO LTD
Japan 59 143 553 (August 1984)

401 Purified vegetable protein
NOVO INDUSTRI A/S
United States 4 478 856 (October 1984)

402 Purified vegetable protein
NOVO INDUSTRI A/S
United States 4 478 940 (October 1984)

403 Protein foods and their various byproducts from cereals
GIE VALPRON
France 2 541 088 (August 1984)

404 Calcium-enriched soybean milk
SUGIYAMA INDUSTRIAL CHEMICAL INSTITUTE HOHNEN OIL CO LTD
Japan 59 173 044 (September 1984)

405 Textured food or feeds
MARS LTD
Switz 645 247 (September 1984)

406 Granulation drying of protein hydrolyzates and meat aroma concentrates
INSTITUT FUER GETREIDEVERARBEITUNG DER DDR
East Germany 212 416 (August 1984)

407 Removal of animal-like odor from animal protein hydrolyzates
SHIMIZU R
Japan 59 173 065 (September 1984)

408 Granular protein structures with increased fish aroma
AKADEMIE DER LANDWIRTSCHAFTSWISSENSCHAFTEN DER DDR
East Germany 211 477 (July 1984)

409 Purifying microbial protein isolates
HOECHST AG
West Germany 3 314 292 (October 1984)

410 Protein-containing biomass
INSTITUL DE CHIMIE ALIMENTARA BUCURESTI
Rome 77 798 (November 1981)

MICROBIOLOGY AND FERMENTATION
(INCLUDING ALCOHOLIC BEVERAGES)

411 Determination of the intensity of fermentation of a fermenting mixture in a stream
KRASNODAR POLYTECHNIC INSTITUTE
USSR 118 916 (October 1984)

412 Control and regulation of microbial fermentation processes
AKADEMIE DER WISSENSCHAFTEN DER DDR
East Germany 211 124 (July 1984)

413 Sorption of microorganisms and cell organoids on solid carriers
LASORSKY J
CS 206 j01 (May 1984)

414 Immobilization of thermophilic microorganisms
TOBACCO AND SALT PUBLIC CORP
Japan 59 159 782 (September 1984)

415 Immobilization of thermophilic microorganisms
TOBACCO AND SLAT PUBLIC CORP
Japan 59 159 784 (September 1984)

416 Covering material for use in the cultivation of algae
NIPPON CARBIDE TOGYO KABUSHIKI KAISHA
India 153 411 (July 1984)

Too strong a light, e.g. very bright sunlight, can inhibit the growth of algae; hence, some means of absorbing or filtering light may be needed by those who cultivate algae. A covering material that absorbs radiation at wavelengths less than 340 nm, and transmits 30 to 90% of the

radiation in the 340-550 nm range has been made, in the form of a film, or plate, composed of an organic film-forming resin and having an ultra-vilot absorber; thin film or plate may be optionally laminated to another plastic film or sheet.

417 Cultivation of yeasts
LENINGRAD TECHNOLOGICAL INSTITUTE
USSR 1 113 405 (September 1984)

418 Inactivation of bacteriophages in fermentation processes
AKADEMIE DER WISSENSCHAFTEN DER DDR
East Germany 212 531 (August 1984)

419 Microbial preparation of an edible acid concentrate
ZENTRALES WARENKONTOR OBST GEMUESE UND SPEISEKARTOFFELN
Belgium 900 029 (October 1984)

420 Microbial production of cellulose
AJINOMOTO CO INC
Japan 59 159 780 (September 1984

421 Biotechnological production of L-malic acid
CHEMISCHE WERKE HUELS AG
West Germany 3 310 849 (September 1984)

422 Microbial degradation of alginic acid
AJINOMOTO CO INC
Japan 59 143 597 (August 1984)

423 Fermentative production of L-threo-B-hydroxy aspartic acid
MEIJI SEIKA KAISHA, LTD
Japan 59 173 08[illegible] (September 1984)

424 Fermentation production of L-glutamic acid
TAKEDA CHEMICAL INDUSTRIES LTD
Great Britain 2 136 432 (September 1984)

425 1-Tryptophan by fermentation
AJINOMOTO CO INC
Europe 124 048 (November 1984)

426 Fermentative production of L-lysine
KYOWA HAKKO KOGYO CO LTD
Japan 59 169 497 (September 1984)

427 Enzyme inhibitor produced by cultivation of Streptomyces microorganisms
SANKYO CO LTD
United States 4 460 765 (July 1984)

428 Production of cellulase
NEW FUEL OIL DEVELOPMENT TECHNOLOGY RESEARCH ASSOC
Japan 59 151 888 (August 1984)

429 Method for extraction of enzymes from microbial cells
TOKUYAMA SODA CO LTD
Japan 59 166 080 (September 1984)

430 Immobilized enzyme-containing microbial cells
IMPERIAL CHEMICAL INDUSTRIES PLC
Europe 118 979 (September 1984)

431 Heat-stable immobilized enzyme for a bioreactor
AGENCY OF INDUSTRIAL SCIENCES AND TECHNOLOGY
Japan 59 146 590 (August 1984)

432 Production of glucoamylase by Schizophyllum commune.
NATIONAL TAX Administration
Japan 59 159 779 (September 1984)

433 Screening microorganisms producing glucose 2-oxidase
NABISCO BRANDS INC
Europe 125 698 (November 1984)

434 Foaming prevention in vinegar fermentation
QP CORP
Japan 59 143 583 (August 1984)

435 Ethanol fermentation
AKADEMIE DER WISSENSCHAFTEN DER DDR
East Germany 212 533 (August 1984)

436 Ethanol production
AKADEMIE DER WISSENSCHAFTEN DER DDR
East Germany 212 053 (August 1984)

437 Alcohol fermentation
MITSUI ENGINEERING AND SHIP BUILDING CO LTD
Japan 59 135 896 (August 1984)

438 Low-alcohol wines
YOMEISHU SEIZO CO LTD
Japan 59 166 076 (September 1984)

439 Low-alcohol wines
YOMEISHU SEIZO CO LTD
Japan 59 166 075 (September 1984)

440 Removing natural colorants from wine
CORNING GLASS WORKS
United States 4 479 970 (October 1984)

441 Low alcohol beer
ROQUETTE FRERES SA
Europe 126 004 (November 1984)

442 Treating beer to prevent chill haze and metal contamination
PQ CORP
Euroep 124 685 (November 1984)

INFESTATION CONTROL AND PESTICIDE

443 Pesticides
CIBA GEIGY AG
Europe 110 829 (June 1984)

444 Pesticide
INSTYTUT PRZEMYSLU ORGANICZNEGO
Poland 122 358 (July 1982)

445 Pesticidal composition
WELLCOME FOUNDATION LTD
Europe 125 471 (November 1984)

446 Removal of trimethyl phosphate from phosphorus-containing pesticides
MOBIL OIL CORP
Europe 120 635 (October 1984)

447 Foaming substances for insect control
LION CORP
Japan 59 148 703 (August 1984)

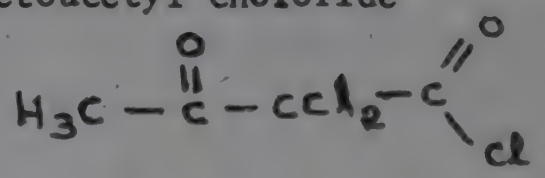
448 Stabilization of a sulfenylated carbamate
CIBA GEIGY AG
Europe 121 498 (October 1984)

449 Alanosines as insecticides
KANESHO CO LTD
Japan 59 161 305 (September 1984)

450 Synergist for pyrethroid insecticides
DAYER AG
West Germany 3 317 823 (November 1984)

451 Heterocyclic nitromethylenses as insecticides
SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJI BV
Japan 59 157 006 (September 1984)

452 A process for the preparation of 2.2-dichloroacetoacetyl choloride
LONEZ LTD
India 153 657 (August 1984)



The structural formula of the compound is
It is prepared by reacting acetyl chloride with chlorine in the presence of a Lewis acid - in particular, aluminium chloride/bromide - at a temperature of 40-50 C. The mole ratio of acetyl chloride to catalyst to chlorine should preferably be 1: 0.03: 1.02. The compound, as also its esters and amides, are useful insecticides

453 Fungicidal agent
BAYER AG
West Germany 3 314 190 (October 1984)

454 Stable fungicidal agent
KOVAC J AND OTHERS
Czech 215 691 (March 1984)

455 Fungicide and its use
BAYER AG
West Germany 3 311 702 (October 1984)

456 Fungicidal composition
SUMITOMO CHEMICAL CO LTD
Japan 59 161 301 (September 1984)

457 Synergistic fungicides
VEB FAHLBERG LIST
East Germany 212 887 (August 1984)

458 Synergistic fungicide
BUDAPESTI VEGYIMUEVEK
West Germany 3 410 566 (October 1984)

459 Synergistic fungicides
VEB FAHLBERG LIST
East Germany 212 8887 (August 1984)

460 Fungicide composition for resistant microorganisms
SUMITOMO CHEMICAL CO LTD
Japan 59 130 202 (July 1984)

461 Imidazoles as fungicides
UBE INDUSTRIES LTD
Japan 59 15[illegible] 304 (September 1984)

462 A process for preparing a fungicidal composition

MONTEDISA SPA

India 153 500 (July 1984)

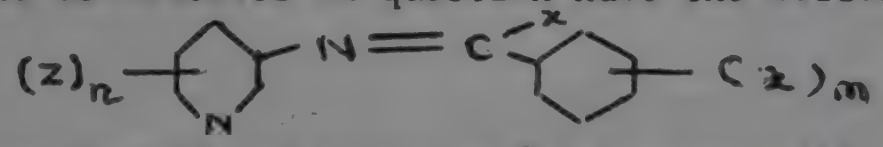
The composition in question consists of two active principles: (i) the fungicide N-(2,6-dimethyl-phenyl)-N-(1-methoxycarbonyl-ethyl)-phenylacetamide; and (ii) a conventional fungicide such as a dithiocarbamate, or an N-haloalkylthio-imide, or copper oxychloride. Compound (i) is endowed with a remarkable anti-mildew activity, a low phytotoxicity, and a systemic action. A combination of compound (i) with one of the compounds mentioned under (ii) has been found to be synergistic.

463 A process for preparing phydridyl-iminoethyl-benzene derivatives

SHELL INTERNATIONALE RESEARCH MAATSCHAPPIJ BV

India 153 816 (August 1984)

The derivatives in question have the following general formula:



They have been found to be useful in controlling various plant disease, e.g., apple powdery mildew, vine downy mildew, vine grey mould, peanut leaf spot, potato late blight, and barley powdery mildew. A greater than 80% disease control has been achieved with most of these derivatives

464 Fungicidal agents containing w-haloacetophenones

VEB CHEMIEKOMBINAT BITTERFELD

East Germany 209 955 (May 1984)

465 w,w-Dihaloaceptophenone fungicidal compositions

VEB CHEMIEKOMBINAT BITTERFELD

East Germany 209 716 (May 1984)

466 Diindolylmethane as a fungicide

NATIONAL INSTITUTE OF AGRO-ENVIRONMENTAL SCIENCES

Japan 59 152 302 (August 1984)

467 Dimethoxycoumarin fungicide

INSTITUTE OF PHYSICAL AND CHEMICAL RESEARCH

Japan 59 157 003 (September 1984)

468 Fungicidal composition trans-3-(4-ter t alkylcyclohexyl-1)-2-methyl-1-dialkylaminopropanes

BASF AG

West Germany 3 309 720 (September 1984)

469 W,W-Dihaloacetophenone fungicidal compositions
East Germany 209 716 (May 1984)

470 Method for promoting plant growth
UNITED STATES DEPT OF COMMERCE
Canada 1 173 659 (September 1984)

471 1-Triacontanol plant growth stimulator formulations
BIOCHEMICAL RESEARCH CORP
United States 4 470 840 (September 1984)

472 3-6-Diaminoacridine N-glycoside plant growth regulating agents
BIOGAL GYOGYSZERGYAR
Europe 121 196 (October 1984)

WASTE UTILISATION

473 A process for the production of proteinaceous material
UNIVERSITY OF WATERLOO
India 153 549 (July 1984)

Agricultural waste materials and also the wastes from the paper industry can be used after heat sterilization and/or a mild alkali treatment - to as a substrate for the cultivation of the fungus *Chaetomium cellulolyticum* (ATTC 32318(or the yeast *landida utilis* (ATCC 9226). The fungal material consists of 45% protein, the balance being mainly fats and starches. The product is a very good animal feed.

474 Processing fresh food wastes
HASHIMOTO K
Japan 59 109 202 (June 1984)

I N D E X

Acid concentrate
edible, microbial production 419
Acid preservation
food 258
Alcohol
fermentation 437
Algae cultivation 416
Alginic acid
microbial degradation 422
Amino acids
as beverage dry mix ingredients 362
preparation 265-6
Amylase determination 285
Amylase
maltogenic 286
Amylase isoenzyme
detection *using* chromogenous starch 284
determination, electrophoresis 283
Analytical technique
meat, constituents 351
Antioxidant
from sesame 297
spices, extraction 389-90
tannin 298
Aspartame
sweetening substance 304-5
Aspartic acid 267
fermentative production 423
Avocado fruit
oil extraction 326
Baker's yeast 341
Bakery product
shortening 336
Beer
low alcohol 441
prevention of chill and metal contamination 442
Beverage
amino acids as ingredients 362
citrus, emulsions of essential oils 363
flavour improvement 360
health beverage from fruit and honey 393
preservative 361
protein enriched drink 394
Biomass
protein containing 410
Bread
dough improved 338
Bread
quality improvement 337
Browning
cooked food, prevention 260
Cake
fats and oils for production of 381
Cake mix
sugar less 340
Canned
vegetable, colour preservation 325
Casein
fatty acid-acylated 347
phosphopeptides 348
precipitation 346
Caseinates
preparation 257
Castor oil
fatty acid acid esters, preparation 358
Cellulase
production 428
recovery 279
manufacture 328-9
microbial production 420
saccharification 330
Cereals
protein food 403
Cheese
simulated 345
starter media 344
Cholesterol
fats and oil, high cholesterol 379
Citrus
beverage, emulsions of essential oils for 363
juice concentrate 364
Cleaning equipment
grains 312-3
Cocoa
drink 373
Coffee
decaffeination 366-9
extract, mutagen-free 370
extract, mutagen removal 371
whitener 372
Container closures
for wine and wine products 261
Cooked food
browning prevention 260

Creative kinase
quantification 294
Cyclodextrin
rice cracker quality improvement 317
Decaffeination
coffee 366-9
Dextrasucrase
purification 291
Dextrose syrup
conversion from starch hydrolysate using immobilised glucoamylase 335
Dialkylaminopropane
fungicide 468
Diaminoacridine glycoside
plant growth regulator 472
Dimdolymethane
fungicide 466
Dimethoxycoumarin
fungicide 467
Dipeptide sweetening substance 303
Dough conditioner 339
Dough improver for bread 338
Drying
protein hydrolysate and meat aroma concentrete, granulation drying 406
Electrophoresis
amylase isoenzyme determination 283
Emulsifer 299
Enzyme
extraction from microbial cells 429
immobilisation 271-5
immobilised 430-1
recovery 266
stable 269-70
Enzyme activity
determination 277-8
Enzyme inhibitor
production by Streptomyces 427
Ethanol
fermentation 435
production 436
Extraction apparatus
heat recovery 253
Fat
milk, freeze-thaw stable edible foam 350
Fats and oils
butter -like 375
extraction, air-gas mixture, extraction vapour recovery 376
Fats and oils
for cake production 381
high cholesterol 379
lecithin rich, production 378
low fat spreads 380
selective reduction 377
Fermentation
alcohol 437
aspartic acid, production 423
bacteriophage inactivation 418
ethanol 435
glutamic acid, production 424
intensity determination 411
lysine, production 426
microbial, control 412
tryptophan, production 425
vinegar, foaming prevention 434
Filler separating apparatus 252
Flavour
beverage, improvement 360
Flavouring substance 301-2
Food waste
processing 474
Fruit
mash, predejuiced, enzymic treatment 359
Fruits and vegetables
discolouration prevention 323
Freshness, food
reagent for 295
Fungicide
453-69
Glucoamylase
immobilisation for converting starch hydrolysate to dextrose syrup 335
microbial production 432
preparation 282
manufacture 331
Glucose oxidase
microbial production 433
Glutamate-oxaloacetate transaminase
determination 287
Glutamic acid
fermentative production 424
Grain
cleaning equipment 312-3
moisture testing apparatus 314
polishing machine 315
Haloacetophenones
fungicide 464, 5, 469

Health beverage
from fruits and honey 393
Hydrolysis
whey, milk sugar 343
Imidazole
fungicide 461
Immobilisation
enzyme 271-5
glucoamylase, *for* converting starch hydrolysate to dextrose syrup 335
thermophillic microorganisms 414-5
Insecticide 447-52
sprayer 256
Iron
additive 309
Isocitrate dehydrogenase
determination 293
Lactic acid 263-4
Lecithin
oils rich in lecithin, production 378
Lipase
stabilisation 290
Lipid
enzymic degradation 387
Lysine
fermentative production 426
Malic acid
microbial production 421
Mayonnaise
simulated 345
Meat
constituents, analysis 351
discolouration prevention 352
Meat aroma concentrate
granulation drying 406
Methyl benzyloxycarbonyl phenylalanine aspartate
determination 292
Microbial fermentation
control 412
Microbial oxidase
glucose oxidase 433
Microbial production
cellulose 420
edible acid concentrate 419
glucoamylase 432
Microbial protein isolate
purification
Microorganism
enzyme extraction 429
sorption 413
thermophillic, immobilisation 414-5
Milk
fat, freeze-thaw stable edible foam 35
gelled milk composition 341
Moisture
packaged food, detection by colour indicators 262
Moisture testing apparatus
for grains 314
Mustard
paste, bitter taste removal 391
Oil
avocado fruit, extraction 326
from rice embryo buds 318
Orange
juice concentrate 365
Packaged food
moisture detection *by* colour indicators
Packaging
meat, adhesives *for* 353
over wrapping apparatus 250
Packaging material
sterilisation 259
Pectin
from sugarbeet, modification 332
Pesticides 443-5
Persimmons
sweetening 392
Phosphatase activity
measurement 281
Plant growth regulators 470-2
Polishing machine
for grains 315
Protein
containing biomass 410
containing food 397-8
enriched drink 394
flakes 400
food *from* cereal 403
food, increasing protein constent 395
from agricultural waste 473
granular *with* fish aroma 408
microbial protein isolates, purificatio 409
of plant origin 399

Protein
recovery *using* shear 396
soybean, odourless, production 320
vegetable protein, purified 401-2
whey, precipitation 346
Protein hydrolysate
animal-like odour removal 407
granulation drying 406
Preservative 296
beverage 361
Proline
preparation 268
Protease
isolation 280
Puffing machine
rice 316
Pyruvate oxidase
determination 289
Rice
cracker, quality improvement, cyclodextrins 317
embryo buds, oil extraction 318
puffing machine 316
Saccharification
cellulose 330
starch 334
Salt substitute 311
Sausage
energy consumption reduction 358
Sesame
as antioxidant 297
Shortening
for bakery product 336
Soybean
glycosides, food product based on 319
meal, defatted, debittered 322
milk, calcium-enriched 404
protein, colourless, production 320
trypsin inhibitor, decreasing 321
Spices
antioxidants, extraction 389-90
Spray drier 254-5
Spraying apparatus
for insecticide 256
Spreads
less fat 380
Starch
saccharification 334
Starch hydrolysate
conversion to dextrose syrup *using* immobilised glucoamylase 335
Sterilisation
packaging material 259
Streptomyces enzyme
enzyme inhibitor production 427
Sucrose fatty acid esters 333
Sugar
non-crystalline 327
Sugar beet
pectin, modification 332
Sweetening substance 308
dipeptide crystals 3030
Tannin
as antioxidant 298
Tea leaf
conditioning apparatus 251
Textured food 405
Thickening composition 300
Triacontanol
plant growth regulator 471
Triglyceride oils
dedourisation 383
Tr impurities removal 382
interesterification 384
Trimethyl phosphate
removal *from* phosphorous containing pesticides 446
Trypsin inhibitor
soybean 321
Tryptophan
fermentative production 425
Vegetable
canned, organoleptic properties 325
Vinegar
fermentation, foaming prevention 434
Vitamin
additive
Water-in-oil emulsion 385-6
Wine
colourant removal 440
container closures 261
low-alcohol 438-9
Whey
milk sugar, hydrolysis 343
protein, precipitation 346
Yeast
cultivation 417

Regd. No. 36730/84

Printed and Published by Dr. B. L. Amla, Director, Central Food Technological Research Institute, Mysore 570 013 at C.F.T.R.I. Offset Printing Unit. Editor : Shri S. V. Sangameswaran, C.F.T.R.I. Mysore

Vol. 7 No. 3
July- Sept. 85

FOOD PATENTS

ISSN 0253 - 491

Central Food Technological
Research Institute, Mysore – 570 013
(C.S.I.R., India)

National Information System for
Science and Technology
Dept. of Science and Technology

FOOD PATENTS

Vol. 7 No. 3

July- Sept. 85

National Information Centre for Food Science and Technology
Central Food Technological Research Institute,
Mysore — 570 013, India

Annual Subn.:Rs.15.00 $10.00 Single copy: Rs.5.00

CONTENTS

ENGINEERING AND EQUIPMENT ... 63

PRESERVATION AND PACKAGING ... 65

CHEMISTRY AND ANALYSIS ... 67

FOOD ADDITIVES ... 68

CEREALS AND MILLETS ... 71

PULSES, OILSEEDS AND NUTS ... 72

TUBERS, VEGETABLES AND FRUITS ... 72

SUGAR, STARCH AND CONFECTIONERY ... 72

BAKERY PRODUCTS ... 73

MILK AND DAIRY PRODUCTS ... 74

MEAT, FISH AND POULTRY ... 75

FRUIT JUICES AND SOFT BEVERAGES ... 76

FATS AND OILS ... 77

SPICES AND CONDIMENTS ... 79

DIETETIC AND PROTEIN FOODS ... 79

MICROBIOLOGY AND FERMENTATION (including Alcoholic Beverages) ... 80

INFESTATION CONTROL AND PESTICIDES ... 84

WASTE UTILISATION ... 86

FOOD PATENTS ENTERS COMPUTER AGE

Food Patents initiated in 1979 was being cold composed on the IBM selectric machine and printed by offset.Now, consequent on the acquisition of a PSI OMNI Computer System by NICFOS under the NISSAT programme,the July- September issue of Food Patents has been produced by using the Word Processor.

The necessary computerisation has been done by Shri H.Y.Mahakuteshwar Scientist, Computer Center and data entry has been done by Miss Suneetha Govinda Rao,Technician of FOSTIS.

(S.V.Sangameswaran)
Area Co-ordinator
Computer Facility

ENGINEERING AND EQUIPMENT

475 Foam dispenser

WRIGHT HE

India 144 933 (July 1978)

A dispensing device that can dispense various types of products - cleaning and waxing products, cosmetics, toiletries, and foodstuffs - that can work even when turned upside down has been devised.

476 Improved infant feeder

THAIKATTIL J

India 154 719 (December 1984)

The improved infant feeder has a tubular body which tapers to a neck towards the top and has an open bottom. A test or nipple can be fitted to the neck of the feeder. The bottom is closed by an inner cap with a lip which is fitted into the bottom with some pressure. An outer cap is screwed on to the thread provided on the outside of the bottles base. These caps from a secure, leak-proof, and hygienic seal for the lower end of the bottom.

477 A cooking utensil

TASGAONKAR (PG)

India 154 291 (October 1984)

The cooking utensil in question is a metallic ring fitted around the base of a cooking vessel. The purpose of the ring is to improve heat transfer from an open flame to the interior of the vessel through its base and sides. The ring has large circular perforations in its side walls, to allow hot air and gases to pass through, and also some notches in its bottom. The ring may also be made up of 4 arcuate segments which are arranged to form a circle.

478 An electric cooker

MOHAN LALL KUTHIALA

India 144 507

The cooker consists of several chambers placed one on top of another. The lower most chamber has an electric heater. When water in this chamber is heated and evaporated, the steam

that is generated passes through a pipe into the upper chamber where a number of items - e.g. rice, dal, vegetables, meat - can be cooked simultaneously and separately. This type of cooking is fully hygienic and especially suited for convalescents and patients. It also provides an easy method of reheating cooked food that has become cold. The quantity of steam entering each chamber can be regulated.

479 A grinder-container attachment for a mixie

MAYA APPLIANCES AND CONTROL EQUIPMENT

India 154 369

The attachment is meant for the purpose of grinding substances like coffee seeds, pepper corns, etc in a domestic mixer or grinder, and then storing the ground material in the container itself. It has a grinder blade assembly unit that is coupled to the driving shaft of the domestic mixer (or mixie), and a container closed on all sides except for an open mouth which has means for engaging it to the grinder unit. After the material has been ground, the container and grinder assembly are detached from the driving shaft, thereafter, the grinder assembly can be separated for cleaning and further use, and the container closed with a lid and kept aside for storage.

480 A wet grinder

MATHIAVANAN P

India 154 367 (October 1984)

Unlike the mechanized wet grinders (stone mortar and pestle) available on the market, the grinder described in this patent is such that only the pestle is rotated by the motor, and not the mortar. Hence, less power is required, and the pestle can also be operated by hand in the traditional way. Moreover, the pit of the mortar has a wide bottom (like the traditional mortars) so that the area over which effective grinding is done in much larger than in the earlier types of mechanical grinders which have a coninal pit. The material is ground much more efficiently and does not get heated up. The bearing lasts much longer, because of the lesser load it has to carry, and the machine is almost free of noise.

481 Improvements in or relating to vent weights for pressure cookers

PRESSURE COOKERS AND APPLIANCES LTD

India 154 769 (December 1984)

A new type of vent weight has been designed which has a straight axial bore, the diameter of which is large when compared to the diameter of the vent tube of the pressure cooker. The upper end of the bore is even wider and forms a chamber

inside the vent weight body. There are eight equally spaced holes in this upper part of the vent weight body. When the maximum pressure is reached, the conical body of the vent weight is partially lifted and partially tilted. The steam that escapes from the vent tube expands in the enlarged chamber and escapes through the holes with only a puffing sound. There is no loud whistling, and the quantity of steam that escapes is reduced.

482 Self-heating or self-cooking vessel

OSTERRATH H

India 154 489 (November 1984)

Vessels of this type are designed as flat folding bags, the two halves of which are normally folded into one another, and thus retained by a closure. Each half is divided into an upper compartment for receiving pieces of food, and a lower compartment for receiving a reactant. There is a third compartment between the borders of the two reactant compartments, and separated from them by a diaphragm. When the two halves of the bag are swung apart, this diaphragm gets ruptured; the liquid enters the reactant compartments and an exothermic or endothermic reaction can take place.

483 A drier

RAMASAMY SP

India 149 815 (August 1981)

The drier consists essentially of a chamber having a perforated bottom. Hot air is passed through the perforations to dry the contents (typically, moist freshly harvested pulses), of the chamber.

PRESERVATION AND PACKAGING

484 Preservation of foods by brining

Great Britain 2,139,475 (November 1984)

485 Method and apparatus for a smoking preparation

INSTYTUT PRZEMYSLU MIESNEGO TLUSZCZOWEGO

Poland 122,947 (June 1984)

486 Container for packaging foodstuffs

METAL BOX LTD

India 154 114 (September 1984)

The containers described herein are of the "freezable-ovenable" type, which can be stored in a domestic freezer at temperature as low as -40 C and heated up in an oven at temperatures as high as 200 C. The containers are made of a paper board material-normally lined with polyethylene terephthalate and perhaps having an external coating of clay to provide a good surface for printing. In order that the container may be easily openable after heating, it is sealed with an adhesive that is non-brittle at sub-zero temperatures, and remains tacky at high temperatures. The preferred adhesive is a copolymer of ethyl hexyl acrylate and vinyl acetate.

487 Containers

METAL BOX P.I.C.

India 154 524 (December 1980)

The containers in question are made from a number of components, at least one of which is a laminar metallic material, and have atleast one seam securring an edge portion of the said laminar metallic component to an overlapping edge portion of a component of the container. The invention consists in applying a layer of resilient polymeric material which is sealingly compressed between the overlapping edge portions. A firm seal is obtained at the joint between the two parts. Particles of the polymer do not get dislodged into the container even when the joint is squeezed.

488 Pilferproof closures

PATEL CS

India 145 734 (December 1978)

A plastic, pilfer-proof cap with a locking arrangement has been described. It has an upper threaded portion, followed by a skirt portion which protects a "sealing member". This type of cap can be "injection moulded".

489 An electrical device for measuring the intanal pressure in sealed containers.

CSIR

India 153 766 (August 1984)

The invention consists of two parts:- (i) a mechanical arrangement and (ii) an electronic measuring systems. It can be used for the on-line testing of the vacuum in filled cans, during production. Operations of the trigger switch initiates total measurement, and the glowing of one of the four indicator lamps indicates the vacuum measured in a non-destructive way. The system is portable and suitable for routine use in canning

factories.

490 Device for discharging round loose material silo

LOTHAR TESKE

India 154 840 (December 1984)

The round silo has a horizontally arranged bottom which is firmly attached to a frame, and has a central discharge opening. A paddle which, arranged over the bottom, rotates about a vertical axis, brushing over the bottom and transporting loose material towards the central discharge opening. Over the paddle wheel there is an insert of conical shape and arranged co-axially with the former; its diameter is greater than that of the discharge opening and its top is directed upwards. The paddle wheel is fastened to a tube-shaped chute which is conical with the discharge opening. The chute is located beneath silo, and can be rotated; its upper mouth is practically flush with the upper side of the silo bottom. The chute is provided with paddle wheel fixtures extending beyond the silo bottom.

CHEMISTRY AND ANALYSIS

491 Chemical analyzer

FUJI PHOTO FILM CO LTD

United States 4,488,810 (December 1984)

492 Two-component paper for rapid testing for nitrite

VEB FORSCHUNGSINSTITUT FUER OBST-UND GEMUESEVERARBEITUNG

East Germany 211,873 (July 1984)

493 Continuous quantitative analyzer for total acids and total amino acids

FUJI ELECTRIC RESEARCH LABORATORY FUJI ELECTRIC CO LTD

Japan 59,142,462 (August 1984)

494 Enzyme immunoassay

IGAKU SEIBUTSU KENKYUSHO KK

Japan 59,206,761 (November 1984)

495 Determination of alpha-amylase

HITACHI LTD

West Germany 3 423 406 (January 1985)

496 Quantitative method for alpha-amylase

FUJI ELECTRIC RESEARCH LABORATORY FUJI ELECTRIC CO LTD

Japan 59 72 056 (April 1984)

497 Determination of thiamin in feed

ALL-UNION SCIENTIFIC-RESEARCH INSTITUTE OF THE MIXED-FEED INDUSTRY

USSR 1 130 800 (December 1984)

498 Determination of the methyl thiophanate content of fruits and vegetables

SCIENTIFIC-RESEARCH INSTITUTE OF MOUNTAINSIDE CULTIVATION OF ORCHARDS AND FLORICULTURE

USSR 1 122 968 (November 1984)

499 Determining amount of phenothiazine in honey

UKRAINIAN SCIENTIFIC-RESEARCH INSTITUTE OF EXPERIMENTAL VETERINARY SCIENCES

USSR 1 120 237 (October 1984)

500 Device and method for quantitative analysis of the fat content in meat products

ALTENBURGER ELECTRONIC G.m.b.H

West Germany 3 320 906 (December 1984)

FOOD ADDITIVES

501 A clarifier for liquids containing particulate solid materials suspended

RAHA AC

India 153 757 (August 1984)

A improved sugar-cane juice clarifier has been designed, which can be used for other juices also. It is efficient and simple in construction, and reduces substantially the residence time of the juice; moreover, the mud formed at the bottom is in a compacted state. The apparatus consists of a square or rectangular box divided by a partition into two chambers; it has

an inlet within each chamber extending along the length of the box, and an outlet in each pair of opposite walls. A tray is provided at the base of the chamber, in order to collect the mud settling therein. A mud well is situated beneath the tray; a rotatable shaft with scraper blades is located in the mud-well to compact the mud.

502 A clarifier for liquids containing particulate solids suspended therein

RAHA AC

India 153 758 (August 1984)

This clarifier (for sugar-cane juice especially) consists of a chamber with an inlet in one side-wall and an outlet in the opposite side-wall. A tray is provided at or near the bottom of the chamber to trap the mud. A rotatable shaft with blades compacts the mud that collects on the tray. Beneath the tray there is a mud-well where the mud is compacted.

503 Food preservative composition

Japan 59 74 965 (April 1984)

504 Preservative composition having a color indicator

DAIRY AND FOOD LABS, INC

WIPO 84 02 923 (August 1984)

505 Dipeptides as salt substitutes

AJINOMOTO CO INC

Japan 59 159 756 (September 1984)

506 Production of pectin

Japan 59 71 699 (April 1984)

507 Preparation of saccharin

BASF AKTIENGESELLSCHAFT

India 154 617 (November 1984)

Saccharin can be prepared in a simpler and more economical manner by the following sequence of reactions:- 1) An aqueous hydrochloric acid solution of O-methoxycarbonyl-benzene diazourium chloride is reacted with sulphur dioxide (at 0 - 100 C) in the presence of a water immiscible, inert organic solvent (2) The diazonium salt is decomposed with the help of a decomposition catalyst (e.g. cupric or cuprous chloride). A surfactant may be used along with the copper slat (3) After separating the aqueous phase of the reaction mixture, the

organic phase is treated with an oxidising agent (Cl2 or H2O2) at a temperature of 0-100 C. (4) The organic phase is reacted with aqueous ammonia and the saccharin is isolated from the aqueous phase by treating it with a strong acid.

508 Process for the preparation of L-aspartic acid N-thiocarboxyanhydride

PFIZER INC

India 154 694 (December 1984)

When N-alkoxythiocarbonyl-L-aspartic acid is reacted with a phosphorus trihalide in a lower alkyl acetate solvent, the desired compound-viz.L-aspartic acid N-thiocarboxyanhydride-precipitates from the reaction solution and can be readily recovered in good yields. This compound, when reacted with lower alkyl esters of N-phenylalanine yields esters of L-aspartyl-L-phenylalanine which are powerful sweetening agents.

509 Soluble preparations of lytic enzymes

POLITECHNIKA LODZKA

Poland 125 898 (May 1984)

510 Method and compositions for preparing phenylalanine

PURIFICATION ENGINEERING INC

Europe 132 999 (February 1985)

511 Flavoring with 2-methoxy-4-(2-methylpropenyl) phenyl ester of isobutyric acid

INTERNATIONAL FLAVORS AND FRAGRANCES INC

United States 4 473 588 (September 1984)

512 Enzymic-microbial preparation of aroma materials

East Germany 208 545 (April 1984)

513 Aliphatic branched olefin dioxolanes, dithiolanes, and oxathiolanes and their uses in augmenting or enhancing the aroma and/or taste of consumable materials

INTERNATIONAL FLAVORS AND FRAGRANCES INC

United States 4 471 789 (September 1984)

514 Inhibiting sweetness

TATE AND LYLE PLC

Europe 125 049 (November 1984)

515 Low-calorie sweetener composition

MARUZEN PETROCHEMICAL CO LTD

Japan 59 183 670 (October 1984)

516 Inhibition of discoloration on cellulose food casings

UNION CARBIDE CORP

Europe 118 784 (September 1984)

517 Cold-water-soluble natural food color agents

T CO LTD

Japan 59 204 660 (November 1984)

518 Mineral-containing polymeric compositions for food enrichment.

R.G.B. LABORATORIES INC

Israeli 63 191 (March 1984)

CEREALS AND MILLETS

519 Improvements in and relating to the treatment of granular materials

CHRISTY AND NORRIS LTD

India 154 660 (December 1984)

The machine described in this patent is meant for the removal of bran from cereals like brown rice, wheat, oats, maize, sorghum, as well as the outer coating of soyabeans, mustard seed, and groundnuts. It consists of horizontal trough inside which are mounted a pair of overlapping circular discs each of which rotates about a fixed vertical axis. The facing surfaces of the discs are abrasive and impert the desired degree of polish to the grain inside the trough. Several pairs of discs may be mounted inside one large trough.

520 Refining of crude rice oil by removing waxes and fats by a continuously operating multistage method

West Germany 3 323 418 (January 1985)

521 Additive mixture for processing sticky wheat doughs

INSTITUT FUER GETREIDEVERARBEITUNG DER DDR

East Germany 213 128 (September 1984)

PULSES, OILSEEDS AND NUTS

522 Isolation of soybean plant saponins

OSAKA CHEMICAL LABORATORY CO LTD

West Germany 3 400 258 (September 1984)

523 Treatment of cashew nut shell liquid

MINNESOTA MINING AND MANUFACTURING CO

India 154 677 (December 1984)

The dihydric phenols present in cashew nut shell liquid (CNSL) are responsible for the dark colour produced when CNSL is polymerized. When CNSL is contacted with amines having a relatively high basicity, then the dihydric phenol forms a complex, and the distillate has an increased cardanol and a decreased cardol content. One can, thus, obtain colourless or only lightly coloured products, with a cardanol content of at least 90% by wt.

524 Fried, dried fruits and nuts

Japan 59 187 758 (October 1984)

TUBERS, VEGETABLES AND FRUITS

525 Preservative for storing sugar beet roots

ALL-RUSSIAN SCIENTIFIC-RESEARCH INSTITUTE OF SUGAR AND SUGAR BEETS

USSR 1 126 271 (November 1984)

526 Enzymic treatment of pomace

NOVO INDUSTRI A/S

United States 4 483 875 (November 1984)

SUGAR, STARCH AND CONFECTIONERY

527 Process and apparatus for continuously producing a high concentration sugar solution

BRAUNSCHWEIGISCHE MASCHINENBAUANSTALT

India 144 912 (February 1978)

The apparatus includes a continuously operating centrifuge to which massecuite is continuously supplied. The centrifuged sugar crystals are contacted by a solvent liquid under pressure in such a manner as to enhance the solving action, whereupon the solution is removed from the centrifuge.

528 Conversion of sucrose to fructose and ethanol

UNIVERSITY OF QUEENSLAND

Zambia 84 02 294 (October 1984)

529 Isomerizing L-mannose to L-fructose

NABISCO NRANDS INC

United States 4 492 755 (January 1984)

530 A process for producing a syrup of a high dextrose content

CPS INTERNATIONAL INC

CPS INTERNATIONAL INC

India 154 830 (December 1984)2

A microbial strain, belonging to the genus Talaromyces, has been found to produce a glucoamylase having an optimum reaction temperature of 75 C; the glucoamylase can retain at least 90% of its initial activity when held at 70 C and pH 4.5 for 10 mins (vide IP 151 247). The properties of this enzyme have been studied and are reported in this patent. The enzyme can be used for the continuous saccharification of starch hydrolysates, on a commercial scale.

531 Treatment of starch or raw materials containing starch

Europe 114 162 (July 1984)

532 Dicalcium phosphate as a gum base filler

WARNER-LAMBERT CO

Zambia 84 00 766 (September 1984)

BAKERY PRODUCTS

533 Fermentation aid for conventional baked goods

STAUFFER CHEMICAL CO

United States 4 500 548 (February 1985)

534 Bread preparation

MAURI BROTHERS AND THOMSON PTY LTD

Netherlands 83 01 974 (January 1985)

535 Quality improvement of frozen bread dough

ASAHI CHEMICAL INDUSTRY CO LTD

Japan 59 220 146 (December 1984)

536 A roti making machine

ATAWANE VM

India 153 995 (September 1984)

A machine that can make roti (i.e. chapati or phulka) or khakhrao (crisp chapati) on a commercial scale has been described. It performs the following four operations automatically and in succession : (i) hatching of flour and fluid for the required quantity of dough, (ii) kneading the flour and fluid into a dough; (iii) preparing the thin circular roti from a billet of dough; and (iv) baking the roti.

537 Leavening acid composition

STAUFFER CHEMICAL CO

United States 4 500 557 (February 1985)

538 Methods for modifying the quality of cake

NATIONAL TAX ADMINISTRATION AGENCY

Japan 59 183 686 (October 1984)

MILK AND DAIRY PRODUCTS

539 Dairy products from bacterial cultures

Europe 130 775 (January 1985)

540 Treatment of milk products with lactic acid bacteria and lactose-splitting enzymes, and use of the resulting products in preparing foodstuffs.

UNILEVER NV UNILEVER PLC

Europe 119 329 (September 1984)

541 Imitation buttermilk dry blend suitable for reconstitution with milk

SCM CORP

United States 4 496 602 (January 1985)

542 Milk coagulating enzyme for cheese making

Canada 1 178 223 (November 1984)

543 Use of whey-derived products as cheese flavoring agents or enhancers

CORNING GLASS WORKS

United States 4 500 549 (February 1985)

544 Manufacturing cheese from starter cultures

LEPRINO FOODS CO

Canada 1 178 113 (November 1984)

545 Instant enzyme hydrolyzed whey powder and its use

DOEHLER ESSENZENFABRIK LEO GEMMER G.m.b.H UND CO KG

Europe 113 898 (July 1984)

MEAT, FISH AND POULTRY

546 Powdered meat and fish extracts

T CO LTD

Japan 59 205 958 (November 1984)

547 An apparatus for pre-incubating eggs

H.G.H.M. PAS

India 145 234 (September 1978)

Stacks of eggs are introduced into the incubating chamber by means of a continuously advancing conveyor. Because of the slow movement of the egg trays, a favourable movement of air is produced, and a correct distribution of temperature differences is obtained. The total energy consumption is also reduced considerably.

548 Gizzerosine from fish meal hydrolyzates

ITOH C FEED MILLS CO LTD

Japan 59 176 264 (October 1984)

FRUIT JUICE AND SOFT BEVERAGES

549 Fruit juice composition

Japan 59 192 076 (October 1984)

550 Beverage

NICEMIL FINE CHEMICALS (PTY) LTD

Zambia 84 01 838 (October 1984)

551 Beverage containing specific cation-edible acid mixtures for improved flavor impression

PROCTER AND GAMBLE CO

Europe 117 653 (September 1984)

552 New semi-frozen soft drinks

OTSUKA PHARMACEUTICAL CO LTD

Japan 59 198 943 (November 1984)

553 Device and method for degassing and carbonizing liquids

VEB KOMBINAT NAGEMA

East Germany 211 489 (July 1984)

554 Frozen coffee creamer composition

MEIJI MILK PRODUCTS CO LTD

Japan 59 41 372 (October 1984)

555 Oil and fat composition for coffee creamers

ASAHI DENKA KOGYO KK

Japan 59 41 689 (October 1984)

556 Decaffeination of coffee

GENERAL FOODS CORP

Japan 59 41 376 (October 1984)

557 Accelerated decaffeination process

PROCTER AND GAMBLE CO

Europe 114 426 (August 1984)

558 Decaffeination process

GENERAL FOODS CORP

Canada 1 177 314 (November 1984)

559 Multi-phase liquid solvent decaffeination

GENERAL FOODS CORP

Canada 1 177 315 (November 1984)

560 Method and apparatus for the decomposition and extraction of materials containing ethereal constituents from natural products, such as medicinal plants, spices, coffee, tea, etc

TECHNICA ENTWICKLUNGS G.m.b.H UND CO KG

West Germany 3 318 317 (November 1984)

561 Improvements in or relating to an apparatus for withering of tea leaves

SOMNATH ROY

India 154 364 (October 1984)

The earlier model which has now been improved has been described in Patent Application No. 748/Cal/80 dated 28.6.1980. The improvement or modification consists of providing a stabilizing or mixing chamber at the inlet end of the trough (having the same overall size and cross-section as the wittering trough) for mixing the ambient air with hot air supplied through fish-tail jets. Two sets of louvres are provided to ensure that while air passes into the lower chamber of the trough, the louvres of the upper chamber are closed, and vice-versa.

FATS AND OILS

562 Edible fat

UNILEVER NV UNILEVER PLC

Europe 129 293 (December 1984)

563 Apparatus and method for deodorizing and/or deacidifying high-boiling edible oils

SCHMIDDING-WERKE SCHMIDDING, WILHELM, G.m.b.H. UND CO

West Germany 3 327 233 (February 1985)

564 Regenerating used vegetable oil after vegetable frying

KRASNODAR POLYTECHNIC INSTITUTE

USSR 1 120 016 (October 1984)

565 Device and method for recovery of fats and oils

KRUPP FRIED G.m.b.H

West Germany 3 322 968 (January 1985)

566 Reaction method for transesterifying fats and oils

ASAHI DENKA KOGYO KK

Europe 126 416 (November 1984)

567 New catalysts for oil hydrogenation

OLIN CORP

Japan 59 142 298 (August 1984)

568 Preparation of extracts (from vegetable oils)

KURARAY CO LTD

West Germany 3 424 614 (January 1985)

569 Method for the preparation of phosphatidylcholine of low oil content.

NATTERMANN A UND CIE G.m.b.H.

United States 4 496 486 (January 1985)

570 Alkali-treated lecithin in fats

PROCTER AND GAMBLE CO

Europe 129 290 (December 1984)

571 Tocopherol

Showa Denko K.K.

Japan 59 154 998 (September 1984)

572 Tocoferol production

AGENCY OF INDUSTRIAL SCIENCES AND TEHNOLOGY

Japan 59 167 585 (September 1984)

573 Low-fat spreads

MEIJI MILK PRODUCTS CO LTD

Japan 59 196 836 (November 1984)

574 Sunflower butter spread products including a pretreatment of the sunflower seeds

CSP FOODS LTD

Canada 1 177 323 (November 1984)

575 Improvement of palm oil products

Japan 59 166 562 (September 1984)

576 Deodorization and stabilization of palm oil and palm oil fractions

INSTITUT PENYELIDIKAN MINYAK KELAPA SAWIT MALAYSIA

Great Britain 141 438 (December 1984)

SPICES AND CONDIMENTS

577 Powdered vegetables and (or) spices extracts

HASEGAWA T CO LTD

Japan 59 205 932 (November 1984)

578 Removal of astringency from persimmons

NIPPON LIGHT METAL CO LTD

Japan 59 220 151 (December 1984)

DIETETIC AND PROTEIN FOODS

579 Health drink formulation

AJINOMOTO CO INC

Japan 59 210 871 (November 1984)

580 Dietetic fiber-enriched soymilk for tofu or soymilk food products

WORLD FOODS CO LTD

West Germany 3 418 400 (November 1984)

581 Odourless soybean milk

KYUSHU NYUGYO KK

Japan 59 192 055 (October 1984)

582 Glucomannan health food materials

Japan 59 198 948 (November 1984)

583 Process for preparation of protein compositions for use in the food industry

KOZPONTI ELELMISZERIPARI KUTATO INTEZET

WIPO 84 03 202 (August 1984)

584 Improved vegetable proteins

AJINOMOTO CO INC

Japan 59 210 097 (November 1984)

585 Fibrous protein production

NIPPON SUISAN KAISHA LTD

Japan 59 192 072 (October 1984)

586 Removing phenylalanine from protein hydrolysates by active carbon

VEB BERLIN CHEMIE

East Germany 211 337 (July 1984)

587 Meat analog product

GENERAL FOODS CORP

United States 4 495 205 (January 1985)

MICROBIOLOGY AND FERMENTATION (including alcholic beverages)

588 Apparatus for detecting microorganisms

METAL BOX PLC

Great Britain 2 142 433 (January 1985)

589 Powdered seaweed and mushroom extracts

T CO LTD

Japan 59 205 965 (November 1984)

590 Biomass production

JOINT CENTER FOR CHEMISTRY SOFIA

West Germany 3 422 111 (December 1984)

591 Immobilization of microorganisms

AGENCY OF INDUSTRIAL SCIENCES AND TECHNOLOGY NICHIBI CO LTD

Japan 59 198 976 (November 1984)

592 Method for producing ehtanol in high concentration by using immobilised micro-organisms

TANABE SEIYAKU CO LTD

India 154 144 (September 1984)

An ethanol producing yeast (belonging to the genus Saccharomyces or Zymomonas) is held immobilised on a base, consisting preferably of a sulphated polysaccharide, and a nutrient culture containing 50 - 100 mg/ml of a fermenting sugar is passed over it. When the sugar content of the nutrient falls below 20% of its initial value, fresh culture broth containing not less than 100 mg/ml of the sugar is added intermittently or continuously until the concentration of ethanol rises to at least 75 mg/ml. or 100 mg/ml. The ethanol containing broth is then separated.

593 Lactic acid fermentation products of sunflower seed milk

SUMITOMO CHEMICAL CO LTD

Zambia 83 08 866 (July 1984)

594 Fermentative production of polysaccharide

MITSUI PETROCHEMICAL INDUSTRIES LTD

Japan 59 192 097 (October 1984)

595 Citric acid production

KEMEROVO TECHNOLOGICAL ISNTIOTUTE OF THE FOOD INDUSTRY

USSR 1 130 604 (December 1984)

596 Fermentative production of amino acids

KYOWA HAKKO KOGYO CO LTD

Japan 59 154 994 (September 1984)

597 Fermentative production of L-glutamic acid

AJINOMOTO CO INC

Japan 59 156 291 (September 1984)

598 L-Aspartic acid

GRAC WR AND CO

Europe 127 940 (December 1984)

599 Glutathione by fermentation

KOHJIN CO LTD

Japan 59 151 894 (August 1984)

600 L-Tryptophan produced by fermentation

AJINOMOTO CO INC

Europe 128 637 (December 1984)

601 Fermentative production of L-tryptophan

Japan 59 192 096 (October 1984)

602 Increasing the production of L-lysine

Czech 216 763 (October 1984)

603 Manufacture of immobilized enzyme preparations

PHILLIPS PETROLEUM CO

Japan 59 196 091 (November 1984)

604 Milk-clotting of proteinase Rhizopus pygmaeus P1-8

VORONEZH TECHNOLOGICAL INSTITUTE

USSR 1 110 801 (August 1984)

605 Method and apparatus for secondary fermentation and vessel containing beverage

Europe 133 346 (February 1985)

606 Non-alcoholic and low-alcoholic fermented drinks

INSTYTUT PRZEMYSLU FERMENTACYJNEGO

Poland 122 914 (September 1982)

607 Manufacture of ethanol

AGENCY OF INDUSTIRAL SCIENCES AND TECHNOLOGY

Japan 59 179 083 (October 1984)

608 Sterilization of a reactor containing immobilized yeast during ethyl alcohol fermentation

NEW FUEL OIL DEVELOPMENT TECHNOLOGY RESEARCH ASSOC

Japan 59 173 086 (September 1984)

609 Stimulation of the alcoholic fermentation of a substrate

UNIVERSITE DE BORDEAUX II

Europe 128 106 (December 1984)

610 Improvement of quality of distilled liquors

FUJI DAVISON CHEMICAL LTD

Japan 59 205 975 (November 1984)

611 Method and apparatus for regenerating an inert gas from a desulfurization installation for must treatment

STRASSBURGER HERMANN G.m.b.H. UND CO KG

West Germany 3 328 743 (December 1984)

612 Wort rectifying installation for obtaining rectified alcohol

KIEV TECHNOLOGICAL INSTITUTE OF THE FOOD INDUISTRY

USSR 1 120 017 (October 1984)

613 A beer diffuser

WALCHANDNAGAR INDUSTRIES LTD

India 146 472 (June 1979)

The new beer diffuser comprises a steam-jacketed cylindrical diffuser shell inclined at an angle of 6 degrees to the horizontal. Inside the shell there is a screw conveyor (rotating at 0.6 r.p.m.) which mixes the beet slices throughly with water and pushes the mixture upwards towards the pulp outlet. A juice inlet is also situated at the upper end, while a juice outlet is provided at the lower end of the cylindrical shell. The high temperature and thorough mixing inside the shell ensure a higher extraction of sugar from the beet roots, in a shorter time.

614 Manufacture of wines

MITSUBISHI CHEMICAL INDUSTRIES CO LTD

Japan 59 39 119 (September 1984)

615 Agent for the surface protection of wines and raw materials of food industry

NEHEZVEGYIPARI KUTATO INTEZET

West Germany 3 427 860 (February 1985)

616 Alcohol-free wine

SEAGRAM JOSEPH E AND SONS INC

Belgium 900 359 (December 1984)

617 Champagne

VEB ROTKAEPPCHEN SEKTKELLEREI

West Germany 213 448 (September 1984)

INFESTATION CONTROL AND PESTICIDES

618 Powder pest control agents for household use

KOBAYASHI PHARMACEUTICAL CO LTD

Japan 59 196 802 (November 1984)

619 Controlled release insecticide preparation

SANKYO CO LTD

Japan 59 186 903 (October 1984)

620 Nonflammable aerosol insecticide

FUMAKILLA LTD

Japan 59 175 403 (October 1984)

621 Insect repellents

UNITED STATES DEPT OF AGRICULTURE

United States 625 328 (June 1984)

622 Insect repellents

EARTH CHEMICAL CO LTD
Japan 59 204 102 (November 1984)

623 Insect repellent carbamates

MITSUBISHI CHEMICAL INDUSTRIES CO LTD

Japan 59 164 706 (September 1984)

624 Synergistic compositions of carbamate insecticides

DU PONT DE NEMOURS E.I. AND CO

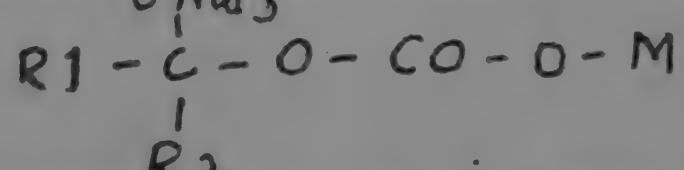
United States 4 490 390 (December 1984)

625 Process for the preparation of trihalomethyl carbonate derivatives

SHELL INTERNATIONALE RESEARCH MATSCHAPPIJ BV

India 153 827 (August 1984)

Trihalomethyl carbonates having the general formula



have been produced by reacting a carbonyl compound (R1-C=O) under substantially anhydrous conditions with a trihaloacetate (Hal3 C-C-O-M) in the presence of a highly polar, aprotic, inert solvent, such as dimethyl sulphoxide, acetonitrile etc. Some of these derivatives may be used as intermediates in the manufacture of synthetic pyrethroids.

626 Process for preparing a crystalline insecticidal pyrethroid enantiomer pair

FMC CORPORATION

India 154 326 (October 1984)

The preparation of (cyano) (3-phenoxyphanyl) methyl 3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate has been described. It involves, essentially, the crystallization at room temperature of the desired compound, from a solution in hexane of a mixture containing the four possible isomers of this molecule.

627 Improvement in or relating to a process for the preparation of an isomeric mixture of m-phenoxybenzyl chrysanthemates ("Phenothrin") substantially rich in m-phenoxybenzyl ( ) trans-chrysanthemate ("Bio-phenothrin")

MESSERS CAMPHOR AND ALLIED PRODUCTS

India 154 322 (October 1984)

A isomeric mixture of alkyl chrysanthemates is first trans-esterified in the presence of a basic catalyst, such as sodium m-phenoxybenzyl alkoxide. The alkoxide is then neutralized with a weak acid,and the reaction mixture is subjected to a liquid-liquid extraction between a polar solvent (e.g. aqueous methanol) and a non-polar solvent (e.g. hexane) so as to separate the biophenothrin from the unreacted m-phenoxybenzyl alcohol.

628 Pheromone carriers

NITTO ELECTRIC INDUSTRIAL CO LTD

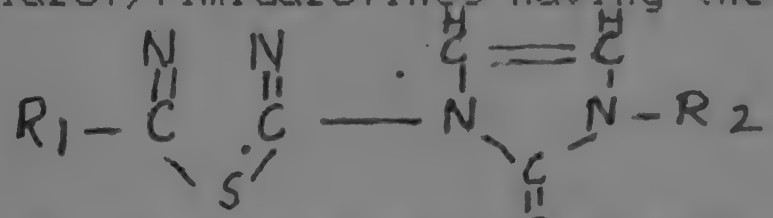
Japan 59 190 902 (October 1984)

629 Process for preparing new thiadiazolylimidazoline compounds

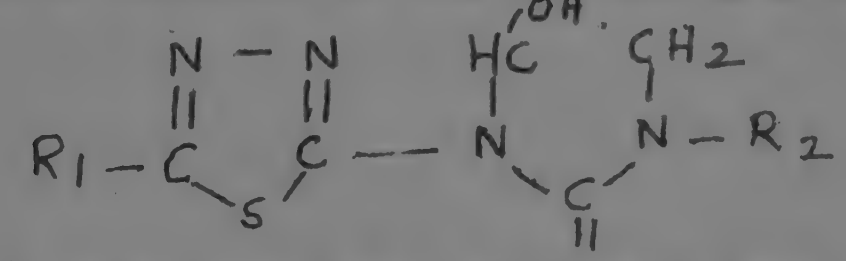
VELSICÓL CHEMICAL CORPORATION

India 144 877 (July 1978)

Thiadiazolylimidazolines having the general formula



can increase the yield of edible matter in the storage organs of crop plants like potatoes, yamp, ktapioca, carrots, turnips, raddish, beet, and onion, without producing any substantial toxic effects on the plants. Through chloride is added to a solution of a compound of the following general type:



in an inert organic solvent such methylene chloride at a temperature of between 0 and 20 C. After the reaction is over, the reaction mixture is allowed to stand for up to 24 h at room temperature, to ensure completion of the reaction. The solvent is then stripepd off from the reaction mixture under reduced pressure, to yield the desired products as the residue. The residue may then be pufified by crystallization etc.

WASTE UTILISATION

630 Cellulose for food use.

United States 4 486 459 (December 1984)

INDEX

Alcohols
  fermentation 609
  rectified (from) wort 612
Alpha amylase
  determination 495-6
Amino acids
  analyser 493
Amino acids
  fermentative production 496
Analyser 491
  amino acid 493
Aroma substance
  enzymic - microbial preparation 512
L-Aspartic acid
  fermentative production 598
Bacteria
  dairy products from bacterial cultures 539
  lactic acid, treatment of dairy products 540
Bakery product
  fermentation 433
Beer
  diffuser
Beverages
  fermentation 605
  fermented, non-alcoholic and low-alcoholic 606
  soft, degassing and carbonising 553
  soft, semi frozen 552
Biomass
  production 590
Bran
  cereal, removal 519
Bread
  dough, frozen, quality improvement 535
  preparation 534
Brining
  preservation of foods 484
Butter milk
  dryblend 541
Butter spreads
  low-fat 573
  (with) sunflower oil 574
Cake
  quality modification 538
Carbamates
  insecticides 624-5
Cashewnut
  shell liquid, treatment 523
Cellulose
  food casings, discolouration inhibition 516
  (for) food use 630
Champagne 617
Cheese
  flavour improvement, whey deriived products 543
  manufacture 544
  milk coagulating enzyme for cheese making 542
Citric acid
  fermentative production 595
Clarifier
  sugar cane juice 501-2
Closure
  pilfer-proof 488
Coffee
  creamer, frozen 554
  creamer, oil and fat composition for 555
  decaffeination 556-9
Colouring substance
  natural, cold water soluble 577
Container
  packaging of foods 486-7
  sealed, internal pressure measurement 489
Cooker
  electric 478
  pressure481
Cooking vessel 477
Cooling
  self cooling vessel 482
Dairy products
  (from) bacterial cultures 539
  treatment with lactic acid bacteria and lactose splitting enzymes 540
Decaffeination
  coffee 556-9
Dextrose syrup
  production 530
Dicalcium phosphate
  gum base filler 532
Dipeptides

Dough
bread, frozen, quality improvement 535
wheat, processing 521
Dried
fruits and nuts 524
Drier 483
Eggs
preincubation 547
Enrichment
mineral containing polymers 518
Enzymes
immobilisation 603
immuno assay 494
lactose-splitting, treatment of dairy products 540
lytic, soluble 509
milk coagulating (for) cheese making 542
Ethanol
see also ethyl alcohol
conversion from sucrose 528
manufacture 606
production (using) immobilised microorganisms 592
Ethyl alcohol
See also ethanol
fermentation 608
Fat
meat, determination 500
Fats and oils
edible 562
edible, deodourising/ deacidifying 563
hydrogenation 567
lecithin, alkali treated 570
recovery 565
transerterification 566
Fermentation
alcohols 609
amino acids, production 596
L-aspartic acid, production 598
bakery product 533
beverages 605
beverages, non-alcoholic and low-alcoholic 606
citric acid, production 595
ethyl alcohol 608
L-glutamic acid, production 597
glutathione, production 599
laclic acid (of) sunflower milk 593
L-lysine, production 602
polysaccharide, production 594
L-tryptophan, production 600-1
Fish
meal hydrolysates, gizzerosine 548
powdered, extract 546
Flavour enhancers 573
Flavouring agent
2-methoxy-4(2-methyl-propenyl) phenyl ester of isobutyric acid 511
whey derived (for) cheese 543
Foam dispenser 475
Food casings
cellulose, discolouration inhibition 516
Frozen
bread dough, quality improvement 535
Fructose
conversion from sucrose 528
isomerisation from L-mannose 529
Fruit juice
composition 549
Fruits
dried 524
Fruits and vegetables
methyl thiophanate, determination 498
Gizzerosine
(from) fish meal hydrolysates 548
Glucomannan
(in) health foods 582
L-glutamic acid
fermentative production 597
Glutathione
fermentative production 599
Grinder
wet 480
Gum base filler
dicalcium phosphate 532
Honey
phenothiazine, deter-

mination 499
Health foods
beverage 579
(with) glucomannan 582
Heating
self heating vessel 482
Hydrogenation
fats and oils 567
Immobilisation
enzyme 603
microorganisms 591
Immuno assay
enzyme 494
Infant feeder
476
Insecticides
aerosol, non-inflammable 620
conbamates 624-5
controlled-release 619
phenothrin 627
pyrethroid 626
Insect repellents 621-3
Isomerisation
L-mannose to L-fructose 529
Leavening compound 537
Lecithin
alkali treated (in) fats and oils 570
Liquor
distilled, quality improvement 610
L-lysine
fermentative production 602
L-Mannose
isomerisation to L-fructose 529
Meat
analogs 587
fat determination 500
powdered, extract 546
Methyl thioprophanate
fruits and vegetables, determination 498
Microorganisms
detection apparatus 588
immobilisation 591
ethanol production 592
immobilised (for)
Mixie
grinder-container attachment 479
Mushroom
powdered extract 589

mination 499
Health foods
beverage 579
(with) glucomannan 582
Heating
self heating vessel 482
Hydrogenation
fats and oils 567
Immobilisation
enzyme 603
microorganisms 591
Immuno assay
enzyme 494
Infant feeder
476
Insecticides
aerosol, non-inflammable 620
conbamates 624-5
controlled-release 619
phenothrin 627
pyrethroid 626
Insect repellents 621-3
Isomerisation
L-mannose to L-fructose 529
Leavening compound 537
Lecithin
alkali treated (in) fats and oils 570
Liquor
distilled, quality improvement 610
L-lysine
fermentative production 602
L-Mannose
isomerisation to L-fructose 529
Meat
analogs 587
fat determination 500
powdered, extract 546
Methyl thioprophanate
fruits and vegetables, determination 498
Microorganisms
detection apparatus 588
immobilisation 591
ethanol production 592
immobilised (for)
Mixie
grinder-container attachment 479
Mushroom
powdered extract 589

Must
treatment 611
Nitrite
testing, two-component paper 492
Nuts
dried 524
Packaging
container 486-7
Palm oil
deodourisation and stabilisation 576
improvement 575
Pectin
production 506
Persimmons
astringency removal 578
Pesticides
powdered (for) household use 618
Phenothiazine
honey, determination 499
Phenothrin
insecticides 627
Phenylalanine
preparation 510
protein hydrolysates, removal 586
Pheromone
carriers 628
Phosphatidylcholine
preparation 569
Plant growth regulators 629
Polysaccharide
fermentative production 594
Pomace
enzymic treatment 526
Preservative 503-4
Pressure cooker 481
Proteinase
(from) Rhizopus pygmaeus, milk clotting 604
Proteins
fibrous, production 585
hydrolysates, phenylalanine removal 586
preparation for use in food industry 583
vegetable, improved 584
Pyrethroid
insecticides 626
Roti
making machine 536
Rice bran oil
refining 520
Refining
rice bran oil 520
Saccharin
preparation 507
Salt substitutes
dipeptides 505
Seaweed
powdered extract 589
Silo
round, discharging device 490
Smoking
preservation of foods 485
Soyabean
milk, dietetic fiber enriched 580
milk, odourless 581
saponins, isolation 522
Spices
powdered extracts 577
Stabilisation
palm oil 576
Starch
treatment 531
Sucrose
conversion to fructose and ethanol 528
Sugar
cane juice, clarifier 501-2
solution, concentrated, production 527
Sugar beet
preservation 525
Sunflower
milk, lactic acid fermentation 593
Sunflower oil
butter spreads 574
Sweetener
L-aspartic acid N-thiocarboxyanhydride 508
low-calorie 515
Sweetness
inhibition 514
Tea
leaves, withering 561
Thiamin
feed, determination 497
Tocopherol
571-2
Transesferification

fats and oils 566
L-Tryptophan
fermentative production 688
Vegetable proteins
improved 584
Vegetable oils
extracts 568
regeneration after frying 564
Wheat
dough, sticky, processing 521
Whey
products for cheese flavour improvement 543
powder, instant 545
Wines
alcohol-free 616
manufacture 614
surface protection agent 615
Wort
(for) rectified alcohols 612

Regd. No. 36730/84

Printed and Published by Dr. B. L. Amla, Director, Central Food Technological Research Institute, Mysore 570 013 at C.F.T.R.I. Offset Printing Unit. Editor : Shri S. V. Sangameswaran, C.F.T.R.I. Mysore

Vol. 7 No. 4
Oct.–Dec. 85

ISSN 0253 - 4916

FOOD PATENTS

Central Food Technological
Research Institute, Mysore – 570 013
(C.S.I.R., India)

National Information System for
Science and Technology
Dept. of Science and Technology

FOOD PATENTS

Vol. 7 No. 4

Oct.–Dec. 85

National Information Centre for Food Science and Technology
Central Food Technological Research Institute,
Mysore — 570 013, India

CONTENTS

ENGINEERING AND EQUIPMENT ... 87

PRESERVATION AND PACKAGING ... 87

CHEMISTRY AND ANALYSIS ... 89

FOOD ADDITIVES ... 89

CEREALS AND MILLETS ... 93

PULSES, OILSEEDS AND NUTS ... 95

TUBERS, VEGETABLES AND FRUITS ... 97

SUGAR, STARCH AND CONFECTIONERY ... 98

BAKERY PRODUCTS ... 99

MILK AND DAIRY PRODUCTS ... 100

MEAT, FISH AND POULTRY ... 102

FRUIT JUICES AND SOFT BEVERAGES ... 104

FATS AND OILS ... 108

SPICES AND CONDIMENTS ... 110

DIETETIC AND PROTEIN FOODS ... 112

MICROBIOLOGY AND FERMENTATION (including Alcoholic Beverages) ... 118

INFESTATION CONTROL AND PESTICIDES ... -

WASTE UTILISATION ...

Annual Subn.:Rs.15.00 $10.00 Single copy: Rs.5.00

ENGINEERING AND EQUIPMENT

631 An improved centrifugal apparatus for separation of sugar crystals from a mother liquor or massecuite

BHUSAN LAL MITTAL

India 155 002 (December 1984)

The centrifugal apparatus described in this patent has three distinct zones for the three steps of forecuring, magma mixing, and final curing. Thus, it avoids the use of a separate magma mixer, as well as the use of a second centrifuge, and is therefore, very efficient in operation. It can also produce sugar crystals having the required degree of purity.

632 Apparatus for continuously separating liquid and solid materials in a slurry

FABCON INCORPORATED

India 154 927 (December 1984)

An apparatus has been designed for the separation of sugar crystals from molasses in massecuite; it operates continuously to purge, wash, dry and remove solids with a minimum amount of mechanical handling and consequential breakage of sugar crystals. The apparatus consists of : (i) a stationary casing; (ii) a horizontal rotary screen within the casing; (iii) a fixed scraper mounted above the screen, (iv) an inlet conduit on one side of the scraper to deposit a slurry on the screen; (v) an outlet conduit on the other side of the scraper to carry away dried solids; and (vi) gas nozzles for directing a gas stream at the solids as they encounter the scraper and directing them through the outlet conduit. The screen divides the casing interior into an upper and a lower chamber which are sealed from one another, except through the screen. When the gas is recirculated a portion of it passes from the upper chamber to the lower chamber under a slight pressure, and carried some of the liquid away through the screen. Compared to centrifuges, this apparatus requires much less power, less sophisticated equipment, and less labour.

PRESERVATION AND PACKAGING

633 Clarification of turbid liquid foods

OKURA SHUZO CO LTD

Japan 60 27 376 (July 1983)

634 Manufacture of dehydrated foods

SANKAI KK

Japan 59 45 334 (March 1977)

635 Readily reconstituted dried, compressed foods

OSAKA GAS CO LTD

Japan 60 16 555 (July 1983)

636 Overcoming undesirable odors and/or flavors

KATADYN PRODUKTE A-G

Switzerland 648 993 (July 1982)

637 Tubular food casing

HOECHST A_G

United States 4 529 634 (July 1982)

638 **Packaging for food**

LEON GABRIEL PJ AND OTHERS

Europe 128 795 (May 1983)

639 **Device for the packaging of powder, granulates, and lump, pasty, and liquid materials to be packed by means of a tubular film**

MASCHINENFABRIK FA NIEPMANN GmbH-& CO

India (December 1984)

Existing tubular bag machines have been modified by mounting the gathering irons on two turret discs, which rotate in opposite directions, such that the gathering irons are always directed transverse to the direction of movement of the tubular film. One obtains, thereby, an apparatus of simple construction and favourable course of motion, which can package powder, granulates, paste, or liquid into the tubular bag, regardless of the length of the bag, and can always operate at the maximum speed of the tubular film; thus, the output of the machine becomes independent of the length of the tubular bag.

640 Autoclavable and gas-sterilizable food packaging materials

TOPPAN PRINTING CO LTD

Japan 60 02 059 (November 1976)

CHEMISTRY AND ANALYSIS

641 Enzymic degradation of pectins

REXOVA-BENKOVA AND OTHERS

Czech 224 911 (June 1982)

642 Production of glutathione

KYOWA HAKKO KOGYO CO LTD

Japan 60 27 397 (July 1983)

643 L-Amino acids by transamination

GENETICS INSTITUTE INC

Europe 135 846 (September 1983)

644 L-Phenylalanine by using a lyase-containing substance

KYOWA HAKKO KOGYO CO LTD

Japan 60 43 393 (August 1983)

645 Manufacture of heat-stable polyphenol oxidase

AJINOMOTO CO INC

Japan 60 62 980 (September 1983)

FOOD ADDITIVES

646 Coated-particle salt substitute containing pottasium chloride coated with maltodextrin

MALLINCKRODT INC

Europe 130 821 (Jdune 1983)

647 Salt substitute blends of pottasium chloride and maltodextrin.

MALLINCKRODT, INC

Europe 130 822 (June 1983)

648 Food preservatives stable to heat and cold

QP CORP

Japan 60 37 965 (August 1983)

649 Ellagic acid as a food antioxidant

MSC KK

Japan 60 15 486 (July 1983)

650 Sweetening composition and process for modifying the sweetness perception of foods

GENERAL FOODS CORP

Europe 132 444 (July 1983)

651 Sweetener tablets

NISSHIN SUGAR MFG CO LTD

Japan 60 19 476 (July 1983)

652 Sugar substitute with no aftertaste

SHOWA SANGYO CO LTD

Japan 60 16 572 (July 1983)

653 Flavor improvement of sugar substitute

GENERAL FOODS CORP

Japan 60 19 473 (July 1983)

654 Improvements of flavor of sugar substitutes

GENERAL FOODS CORP

Japan 60 19 472 (July 1983)

655 Food product containing sweetness modifiers

GENERAL FOODS CORP

France 2 548 874 (July 1983)

656 Food products containing sweetners modifiers

GENERAL FOODS COPR

France 2 548 875 (July 1983)

657 Heat-and enzyme-stable dipeptide sweeteners

AJINOMOTO CO INC

Japan 60 37 948 (August 1983)

658 Heat stabilized dipeptide sweetener

SEARLE GD AND CO

Europe 137 326 (September 1983)

659 Improvement of flavor and aroma of dipeptide sweeteners

NISSHIN SUGAR MFG CO LTD

Japan 60 19 475 (July 1983)

660 Dipeptide sweetener lipid gel

GENERAL FOODS CORP

Europe 137 690 (September 1983)

661 Stable aspertame sweeteners

AJINOMOTO CO INC

Japan 60 37 949 (August 1983)

662 Improvement of flavor of aspartame sweeteners

NISSHIN SUGAR MFG CO LTD

Japan 60 19 474 (July 1983)

663 Lecithin for aspartame stabilization at high pH

AJINOMOTO CO INC

Japan 60 49 762 (August 1983)

664 Modification of stevia sweetener

MORITA KAGAKLU KOGYO CO LTD

Japan 59 51 257 (April 1976)

665 Synergistic sweetener containing acesulfame

PFIZER INC

Europe 139 430 (September 1983)

666 Anthocyanin pigments

SAN EI CHEMICAL INDUSTRIES LTD

Japan 59 223 756 (June 1983)

667 Production of yellow-orange and red-orange food colors from Euphausia superba

SAN EI CHEMICAL INDUSTRIES LTD

Japan 60 35 057 (June 1984)

668 Cocoa food coloring agents

GLICO EIYO SHOKUHIN KK

Japan 60 43 348 (August 1983)

669 Coloring agent from red beet

DRDAK MILAN AND OTHERS

Czech 225 529 (August 1982)

670 Pectin-based clouding agent

GENERAL FOODS CORP

United States 4 529 613 (September 1983)

671 Emulsifier preparation and use

RIKEN VITAMIN CO LTD

Germany (West) 3 440 851 (November 1983)

672 Anticholestermic food emulsifier containing monolinolein

AJINOMOTO CO INC

Japan 60 43 348 (August 1983)

673 Particulate food acidulant

SCM CORP

United States 4 511 584 (May 1983)

674 Food mutagen-inhibitng monoglyceride additives

NIPPON OILS AND FATS CO LTD

Japan 60 84 219 (October 1983)

675 Ethanolic food preservative composition

SANRA-KU-OCEAN CO LTD

Japan 59 227 281 (June 1983)

676 Dextrin alcohols as food antistaling agents

QP CORP

Japan 60 49 737 (August 1983)

CEREALS AND MILLETS

677 A rice polisher

BINNY LTD

India 155 040 (December 1984)

The polisher described in this patent has very sharp and hard abrasive rolls, preferably made of silicon carbide. These

rolls set as blades to cut and remove the bran layer from dehusked rice. A jet of air is blown through the milling chamber to facilitate removal of the bran. Thereby, cake formation is avoided during the milling of parboiled rice. The whiteness of the finished rice can be varied by adjusting the weights placed at the outlet end of the chamber.

678 Improvement of rice quality for application in food processing

HOSHINO BUSSAN KK

Japan 59 50 301 (November 1977)

679 Rice that can be cooked without ashing

INSTITUTE FOR PRODUCTION AND DEVELOPMENT SCIENCE

Japan 60 54 650 (September 1983)

680 Beverages from cereal hydrolyzates

NIPPON SEIBAKU KK

Japan 60 09 458 (June 1983)

681 Isolation of phytin from rice bran

KANEMI SOKO CO LTD

Japan 60 58 993 (September 1983)

682 Malt product consisting of a mixture

KRUEGER

Europe 140 146 (May 1985)

PULSES, OILSEEDS AND NUTS

683 Treatment of oilseeds and legume seeds

ACADEMIC DER WISSENSCHAFTEN DER DDR

Germany (East) (July 1983)

684 Protein isolates from legumes

MIETH AND OTHERS

Germany (East) 214 527 (April 1983)

685 Products derived from soybean meal

NOVAVIS INTERCONTINENTAL LTD

France 2 549 351 (July 1983)

686 Calcium-enriched soybean milk

KAWASAKI KASEI CHEMICALS LTD

Japan 60 47 635 (August 1983)

TUBERS, VEGETABLES AND FRUITS

687 Preservation of fresh fruits and vegetables

HOHNEN OIL CO LTD

Japan 60 24 152 (July 1983)

688 Coating materials for preservation of fresh fruits and vegetables

TANAKA and others

Japan 59 227 239 (June 1983)

689 Prevention of discoloration of cut fresh salad vegetables

KENKO MAYONNAISE KK

Japan 60 19 470 (July 1983)

690 Crisp snacks from vegetables and fruits

AMANO CORP

Japan 60 37 940 (August 1983)

691 Calcium-rich pickled vegetables

KAWASAKI KASEI CHEMICALS LTD

Japan 60 41 440 (August 1983)

692 Preservation of peeled fresh potatoes

KENKO MAYONNAISE KK

Japan 60 19 446 (July 1983)

693 Blanching mushrooms and others vegetables and apparatus for implementing such process

SPINOGLIA MARIA

Wipo 85 01 420 (October 1983)

694 Device for continuously selecting fruits as to their sugar content

GIRUAD AND OTHERS

Europe 129 630 (June 1983)

695 Climate control for fruit storage units

KARL-MARX-UNIVERSITAET LEIPZIG

Germany (East) 219 377 (December 1983)

696 Citrus fruits storage in ozone environment

NAGANO KIDA KOGYO KK

Japan 60 49 743 (August 1983)

697 Apparatus for filling syrup under vacuum in a can containing acid fruits

CSIR

India 154 299 (October 1984)

An apparatus that may be called a "prevacuumizer-cum-syruper" has been designed to replace the expensive and cumbersome exhaust box and increase productivity in small-scale canning industries. The apparatus has two tubes, one of which

sucks out all the air entrapped in the can and in the fruit cells, while the other fills sugar syrup into the can. Because of the thorough removal of air from the fruit cells the syrup penetrates much more thoroughly into them, and a pack of better quality is obtained. As a faulty can cannot be vacuumised, this apparatus also sets as an inspection device for cans. The machine is simple in design and easy to instal.

SUGAR, STARCH AND CONFECTIONERY

698 Apparatus for producing sugar solution of constant density from sugar and dissolving fluid

HEIN LEHMANN AG

India 155 093 (December 1984)

The object of this invention is to produce a sugar solution of constant density from sugar and a dissolving fluid, particularly in a continuously operating centrifuge. First, the density of the mixture is determined with the help of a densitometer. A signal generator assigned to the densitometer gives out a signal which is fed to a regulator that controls the adjusting member for dosing the quantity of dissolving fluid (e.g. water). Thus, only one parameter - viz. the quantity of dissolving fluid - has to be regulated, and the whole regulation process is very much simplified.

699 High sugar syrups

UOP INC

United States 4 511 654 (March 1982)

700 Determination of the sugar content in sugar beets

MIHUTA ELEONORA AND OTHERS

Rumania 85 551 (December 1982)

701 Polysaccharide production

HOUSE FOOD INDUSTRIAL CO LTD

Japan 60 02 194 (June 1983)

702 Processing of polysaccharides

UNILEVER N V

Europe 121 960 (March 1983)

703 Starch hydrolysates

GRAIN PROCESSING CORP.

Europe 141 602 (October 1983)

704 Confectionery product

PELOU AND OTHERS

France 2 550 061 (April 1983)

705 Stable royal jelly powder

SANRAKU OCEAN CO LTD

Japan 60 37 947 (August 1983)

BAKERY PRODUCTS

706 Refrigerated dough

PILLSBURY CO

United States 4 526 801 (August 1983)

707 Dough conditioner composition

RIKEN VITAMIN CO LTD

Japan 60 30 633 (July 1983)

708 Active gluten as a dough conditioner

KYOWA HAKKO KOGYO CO LTD

Japan 60 30 644 (July 1983)

709 Improvement of dough conditioning activity of ascorbic acid

RIKEN VITAMIN CO LTD

Japan 60 30 634(July 1983)

710 Fermentation of whey for bakery product preservation

STAUFFER CHEMICAL CO

Europe 141 642 (November 1983)

711 Antistaling baking composition

COLE MORTON S

Canada 1 186 937 (March 1981)

712 Low-calorie yeast-leavened bread

CAMPBELL TAGGART INC

Europe 146 044 (November 1983)

713 Fast-cooking noodles

MARUMI CO LTD

Japan 60 12 946 (July 1983)

MILK AND DAIRY PRODUCTS

714 Sterile dairy product with a decreasd lactose content

TETRA PAK INTERNATIONAL AB

Sweden 438 773 (November 1974)

715 Milk and milk products with lowered calcium and increased magnesium contents

LABORATORIES MERAM

France 2 552 631 (October 1983)

716 Preparation of a milk sample for determining the fat content

KUBAN AGRICULTURAL INSTITUTE

USSR 1 150 535 (November 1981)

717 Infant food based on milk powder

MELEGHI AND OTHERS

Rumania 85 045 (June 1982)

718 Quality testing of a cheese product

NORTHEVED AND OTHERS

Denmark 148 068 (April 1980)

719 Imitation cheese products containing modified starch as partial caseinate replacement

NATIONAL STARCH AND CHEMICAL CORP

United States 4 499 116 (June 1983)

720 Continuous fermentation of whey permeate

CHERYAN MUNIR AND OTHERS

Wipo 85 01 064 (August 1983)

721 Aspartylphenylalamine methyl ester as yogurt sweetener

AJINOMOTO CO INC

Japan 59 224 650 (June 1983)

MEAT, FISH AND POULTRY

722 Quality control of products from fish, cattle, swine and poultry

DE FORENEDE BRYGGERIER A/S

Europe 128 889 (June 1983)

723 Flavor and aroma improvement in processed meat products

AJINOMOTO CO INC

Japan 60 47 660 (August 1983)

724 Tenderization of meat cuts with xanthan gum

MILLER AND OTHERS

Wipo 85 001 091 (June 1983)

725 Sterilization and stabilization for meat analog products

PROCTER AND GAMBLE CO

Europe 128 610 (June 1983)

726 Fibrous protein for meat substitute production

SNOW BRAND MILK PRODUCTS CO LTD

Japan 60 05 357 (October 1977)

727 Egg yolk ethanol extract preparation

NAKAZONO

Japan 60 55 095 (September 1983)

728 Additives for whippable egg white-containing products

HILLIER

Austria 542 048 (April 1981)

729 Seamed cellulosic sausage casing

HOECHST AG

Germany (West) 3 338 054 (October 1983)

730 A simple method for the determination of freshness of fish meat by measuring K values

ORIENTAL YEAST CO LTD

Japan 60 47 695 (August 1983)

731 Treatment of fish for use as meat substitutes

TAIYO FISHERY CO LTD

Japan 60 47 662 (August 1983)

732 Polymeric composition for coating frozen fish and fish products

STATE DESIGN CONSTRUCTION INSTITUTE OF FISHING FLEETS

USSR 1 113 075 (May 1982)

733 Salmon roe processing

TAIYO FISHERY CO LTD

Japan 60 09 473 (June 1983)

734 Additive for preserving crustaceans

ALIMENTACION Y TECNOLOGIÁ SA

Spain 523 816 (July 1983)

735 Caviar preservation

ALL UNION SCIENTIFIC RESEARCH INSTITUTE OF SEA FISHING ECONOMY AND OCEANOGRAPHY

USSR 1 158 147 (November 1983)

FRUIT JUICE AND SOFT BEVERAGES

736 Filter aid for use in the beverage industry

VEB GETRAENKEKOMBINAT BERLIN

Germany (East) 215 577 (May 1983)

737 Continuous carbonation measuring system and method for beverages

PEPSICO INC

United States 4 517 135 (June 1983)

738 Instant beverage

INSTITUTUL DE CERCETARI CHIMICO FARMACEUTICE

Rumania 84 180 (April 1982)

739 Inhibiting tartar formation in beverages

HOECHST AG

Germany (West) (September 1983)

740 Upflow ion exchange treatment of natural edible juices containing high acidity and suspended solids

MITCO WATER LABORATORIES INC

United States 4 522 836 (May 1983)

741 Aseptic juice or beverage and flavor enhancement system therefor

SQUIRT AND CO

Europe 136 793 (August 1983)

742 Removal of bitter naringin and limonin from citrus juices containing them

MITCO WATER LABORATORIES INC

United States 4 514 427 (may 1983)

743 Citrus flavored beverage in polyethylene containers

GENERAL FOODS INC

United States 4 529 606 (August 1984)

744 Nonalcoholic bheverage containing tkemali juice

KUTAISI POLYTECHNIC INSTITUTE

USSR 1 152 559 (September 1982)

745 Coffee extract decaffeination

GENERAL FOODS CORP

United States 4 521 438 (June 1985)

746 Cocoa and (or) coffee substitutes

AJINOMOTO CO INC

Japan 60 49 751 (August 1983)

747 Agent for inactivating the mutagenicity of coffee

SUNTORY LTD

Europe 128 333 (June 1983)

748 Calcium-enriched green tea

KANEMASU IKEDAEN KK

Japan 60 34 130 (August 1983)

749 Device and method for decaffeination of tea leaves

THEISSING PETER AND OTHERS

Germany (West) 3 339 181 (October 1983)

750 Aroma and flavor enhancement in cocoa

MEIJI SEIKA KAISHA LTD

Japan 60 02 022 (August 1977)

FATS AND OILS

751 Apparatus for prevention of atmospheric pollution from deodorizing columns for edible oils and fats, with low energy consumption

CEZILLY FRANCOIS AND OTHERS

France 2 554 826 (November 1983)

752 Azeotrophioc fractionation of fats and oils

SOCIETE DES PRODUITS NESTLE SA

Europe 132 506 (July 1983)

753 Transestgerification of fats and dry cells suitable for the process

KANEGAFUCHI CHEMICAL INDUSTRY CO LTD

Germany (West) 3 428 486 (August 1983)

754 Oil and fat composition for bakery products

FUJI OIL CO LTD

Japan 60 19 448 (July 1983)

755 Fatty materials

SOCIETE DES PRODUITS NESTLE SA

Europe 137 862 (October 1983)

756 Measurement of fat

SHIELDS INSTRUMENTS LTD

Europe 122 749 (April 1983)

757 Edible plastic fat products

KANEGAFUCHI CHEMICAL INDUSTRY CO LTD

Europe 142 168 (November 1983)

758 Edible fractions of fatty material and their use

SOCIETE DES PRODUITS NESTLE SA

Europe 139 177 (October 1983)

759 Hydrogenated fat

LVOV POLYTECHNIC INSTITUTE

USSR 1 142 505 (February 1983)

760 Lecithin containing cooking fats with reduced thermal discoloration

PROCTER AND GAMBLE CO

United States 4 524 085 (November 1983)

761 Lecithin-containing food product

UNILEVER NV

Europe 146 987 (November 1983)

762 Low-calorie edible oil substitutes

CPC INTERNATIONAL INC

United States 4 508 746 (June 1983)

763 Apparatus for cleaning cooking oil

CHOJOHA GIKEN KK

Germany (West) 3 433 477 (September 1983)

764 Composition for soidification of waste cooking oil for disposal

WAKABA KAGAKU KK

Japan 60 20 985 (July 1983)

765 Lipids

ALL UNION SCIENTIFIC RESEARCH INSTITUTE OF PROTEIN BIOSYNTHESIS

USSR 1 045 632 (July 1981)

766 Recovery of ubiquinones from lipid extracts

AKADEMIE DER WISSENSCHAFTEN DER DDR

Germany (East) 215 091 (May 1983)

767 Phospholipid solubility improvement in oils

SANYU SHOJI CO LTD

Japan 60 49 747 (August 1983)

768 Reforming of phospholipids

ASAHI CHEMICAL INDUSTRY CO LTD

Japan 60 105 686 (November 1983)

769 Production of high purity tocopherol

SHOWA DENKO KK

Japan 60 48n 981 (August 1983)

770 Fat emulsions by emulsifying and/or homogenizing edible fats and or oils

VEB KOMBINAT OEL AND MARGARINE

Germany (East) 218 271 (June 1983)

771 Edible water-in-oil-in-water emulsion

UNILEVER NV

Europe 141 477 (November 1983)

772 Watger-in-oil-in-water type coffee creamer composition

MEIJI MILK PRODUCTS CO LTD

Japan 60 16 542 (July 1983)

773 Margarine product or spread production by phase inversion

NABISCO BRANDS INC

Europe 139 398 (September 1983)

774 Butter cream margarine composition

NIPPON OILS AND FATS CO LTD

Japan 60 16 550 (July 1983)

775 Safflower oil and lecithin mixture as food additives

SOMAR MFG CO LTD

Japan 60 09 448 (June 1983)

776 Refining of palm oils

INSTITUT PENVELIDIKAN MINYAK KELAPA SAWIT MALAYSIA

Britan 2 144 143 (June 1983)

777 Wheat germ oil production

SEITETSU CHEMICAL INDUSTRY CO LTD

Japan 60 58 498 (September 19838)

778 Pumpkin oil

YAMAJIRUSHI JOZO KK

Japan 60 26 097 (July 1983)

779 Cocoa butter substitutes

FUJI OIL CO LTD

Japan 60 00 395 (December 1976)

780 Cacao butter substitutes and chocolates containing them

ASAHI DENKA KOGYO KK

Europe 130 487 (June 1983)

781 Fried foods of reduced oil absorption and methods of preparation employing spray of film forming agent

GENERAL MILLS INC

United States 4 511 583 (July 1983)

SPICES AND CONDIMENTS

782 Salty condiments

FABRE

France 2 547 992 (July 1983)

783 Improvement of glutamate and nucleoside condiments

AJINOMOTO CO INC

Japan 60 09 465 (June 1983)

784 Production of condiment from soy sauce

AJINOMOTO CO INC

Japan 60 62 958 (September 1983)

785 Improvement of flavor of synthetic condiments

AJINOMOTO CO INC

Japan 60 09, 464 (June 1983)

786 Improvement of emulsion characteristics of white sauce mix

QP CORP

Japan 60 24 160 (July 1983)

787 Tomato-based sauce products containing textured protein

PROCTER AND GAMBLE CO

Europe 140 442 (October 1983)

788 Increase in salty taste of low-salt soy sauce

KIKKOMAN CORP

Japan 60 19 477 (July 1983)

789 Sweetening of astringent persimmons

NIIGATA PREFECTURE NIIGATAKEN KEZAI NOGYO KYODO KUMIAI RENGOKAI

Japan 60 49 742 (August 1983)

DIETETIOC AND PROTEIN FOODS

790 Manufacture of health foods

JAPAN MAIZE PRODUCTS CO LTD

Japan 59 232 054 (June 1983)

791 Health drink formulation containing vinegar and germanium

REFORM SYSTEMS KK

Japan 60 41 472 (August 1983)

792 Bifidobacterium growth promoters as health foods

DAIICHI SEIYAKU CO LTD

Japan 59 132 884 (January 1983)

793 Ginseng saponin-like plant extracts as health food additives

OSAKA YAKUHIN KENKYUSHO KK

Japan 60 09 454 (June 1983)

794 Health food supplement rich in polyunsaturated fatty acids

SANYU SHOJI CO LTD

Japan 69 49 745 (August 1983)

795 Infant foods

GLAXO GROUP LTD

Europe 129 418 (June 1983)

796 Modifying the conformation of food and feed protein

DEVENYI TIBOR AND OTHERS

Canada 1 183 837 (April 1981)

797 Protein isolates

UNIVERSITE DE BORDEAUX II

France 2 549 350 (July 1983)

798 Taste-modified protein hydrolysate

MINISTERIUM FUER LAND FORST UND NAHRUNGSGUETERWIRTSCHAFT

Germany (East) 217 981 (July 1983)

799 Steam stripping an aqueous slurry or solution of protein to remove off-flavors

PROCTER AND GAMBLE CO

Europe 124 165 (April 1983)

800 Proteins from plant materials

AKADEMIE DER WISSENSCHAFTEN DER DDR

Germany (East) 215 693 (May 1983)

801 Recovery of granular protein concentrates from green plants

KRELL

Germany (East) 215 694 (May 1983)

802 A hydrolyzed vegetable protein isolate and its use

RALSTON PURNIA CO

Europe 141 615 (October 1983)

803 Preparation of imitation foods of a tender texture from proteinaceous extrudates

STALEY AE MFG CO

United States 4 517 218 (January 1982)

804 Meat-like foods

AJINOMOTO GF PROTEIN INC

Europe 131 1075 (July 1983)

805 Fortified food product

UNIVERSITATEA GALATI

Rumania 85 748 (July 1982)

MICROBIOLOGY AND FERMENTATION

806 Detection of viruses in pure cultures of microorganisms as well in foods and in technological products

LEMLBKE

Europe 143 107 (October 1983)

807 Electrochemical purification of a medium for cultivation of microorganisms

LENINGRAD TECHNOLOGICAL INSTITUTE

USSR 1 142 451 (October 1982)

808 Deactivation of microorganisms by an oscillating magnetic field

MAXWELL LABORATORIES INC

Wipo 85 02 094 (November 1983)

809 Immobilization of microorganism cells

DENKI KAGAKU KOGYO KK

Japan 60 09 486 (June 1983)

810 Yeast cultivation

VEB PETROCHEMISCHES KOMBINAT SCHWEDT

Germany (East) 219 041 (September 1982)

811 Measuring the alcohol concentration in an acetic acid fermentation broth

NAKANO VINEGAR CO LTD

Germany (West) 3 441 523 (November 1983)

812 Automatic control of anerobic alcoholic fermentation

KAUNAS POLYTECHNIC INSTITUTE

USSR 1 157 049 (August 1983)

813 Determination of the carbon concentration in a fermentation process

KAUNAS POLYTECHNIC INSTITUTE

USSR 1 147 751 (May 1983)

814 Optical system for spectrophotometry of fermentation media

BAYER CLAUS AND OTHERS

Germany (East) 216 106 (June 1983)

815 Malolactic fermentation

MICJROLIFE TECHNICS INC

Europe 141 878 (October 1983)

816 Dairy bacterial starter concentrate

SCIENTIFIC INDUSTRIAL ENTERPRISES OF POULTRY PROCESSING AND THE GLUE GELATIN INDUSTRY

USSR 1 156 614 (December 1982)

317 Determining the biomass production of nitrogen free carbon sources

AKADEMIE DER WISSENSCHAFTEN DER DDR

Germany (East) 218 688 (JUne 1983)

318 Single-cell protein from organisms grown on methanol

HOLLO JANOS AND OTHERS

Hungary 34 233 (March 1983)

319 Food-grade vinegar

ALL UNION SCIENTIFIC RESEARCH INSTITUTE OF FERMENTATION PRODUCTS

USSR 1 155 617 (December 1983)

320 Citric acid by fermentation

SHOWA OIL CO LTD

Japan 60 24 191 (JuHy 1983)

321 Microbial production of acetic acid

AGENCY OF INDUSTRIAL SCIENCES AND TECHNOLOGY

Japan 60 70 091 (September 1983)

322 Lactic acid by immobilized Rhizopus

IWATA KAGAKU KOGYO KK

Japan 60 06 196 (June 1983)

323 Amino acids by culturihng Corynebacterium glutamicum ATCC-21513

TORAY INDUSTRIES INC

Japan 60 47 691 (August 1983)

824 Fermentative production of L-aspartioc acid

AJINOMOTO CO INC

Japan 59 227 298 (December 1984)

825 Fermentative production of L-tryptopahn

AJINOMOTO CO INC

Japan 60 12 997 (July 1983)

826 Promotion of glutathione production by yeasts

KYOWA HAKKO KOGYO CO LTD

Japan 60 24 197 (July 1983)

827 Microbial production of glutathione

KYOWA HAKKO KOGYO CO LTD

Japan 60 27 396 (July 1983)

828 Fermentative production of L-threonine

AJINOMOTO CO INC

Japan 60 47 692 (August 1983)

829 L-Lysine

KIRHENSTEINS A

USSR 778 256 (December 1978)

830 L-lysine immobilized bacteria

TORAY INDUSTRIES INC

Japan 60 12 996 (May 1983)

831 Method and apparatus for producing enzymes by biosynthesis

INSTITUTUL DE CHIMIE ALIMENTARA, BUCURESTI

Rumania 83 122 (September 1981)

832 Thermostable α-amylase byculturing microorganisms at elevated temperatures

COMPANIA ESPANOLA DE PETROLEOS S A CEPSA

Europe 140 619 (October 1983)

833 Enzymic production of sugar derivatives of phospholipids

MEITO SANGYO CO LTD

Japan 59 187 792 (April 1983)

834 Adsorbents for alcoholic beverages

MIZUSAWA INDUSTRIAL CHEMICALS LTD

Japan 60 41 476 (August 1983)

835 Ultrafiltration of fermented liquor

AJINOMOTO CO INC

United States 4 523 999 (December 1983)

836 Microbial production of ethanol

AGENCY OF INDUSTRIAL SCIENCES AND TECHNOLOGY

Japan 60 707 089 (September 1983)

837 Device for alcohol distillation with a low energy consumption

DE SANIT LAUMER DANIEL

France 2 553 098 (May 1983)

838 Alcohol fermentation by immobilized microbes

NEW FUEL OIL DEVELOPMENT TECHNOLOGY RESEARCH ASSOC

Japan 60 06 195 (June 1983)

839 Sorption agent with a view to stabilizing colloidal and organoleptic properties of beer, wine, liquor and fruit drinks containing organic compounds

VYSOKA SKOLA CHEMICKO TECHNOLOGICKA

Belgioum 901 389 (December 1984)

840 Aging of beer

KEMEROVO TECHNOLOGICAL INSTITUTE OF THE FOOD INDUSTRY

USSR 1 155 616 (December 1983)

841 Measuring concentration of gas in a liquid

SCOTTISH AND NEWCASTLE BREWERIES LTD

Austria 542 684 (June 1980)

842 Beer wort

RIEV TECHNOLOGICAL INSTITUTE OF THE FOOD INDUSTRY

USSR 1 158 572 (December 1983)

843 Extraction of hop constituents

HOPFEN EXTRAKTION BARTH UND CO

Germany (West) 3 346 776 (December 1983)

844 Enzyme-inactivated hops

UNIVERSITY OF TASMANIA

United States 4 511 587 (January 1982)

845 Wine from whole citrus juice

KUMAMOTO PREFECTURE

Japan 60 30 674 (July 1983)

846 Stabilization and preservation of wine

UNIVERSITE DE BORDEAUX II

France 2 546 906 (June 1983)

INFESTATION CONTROL AND PESTICIDES

847 A device for spraying liquid based chemicals

AMIABHA DATTA

India 154 745 (December 1984)

An electrostatic liquid sprayer or atomizer has been designed for spraying oil-based agricultural chemicals such as pesticides. The droplets have a size of 40-200 microns, and travel at a speed of 12-15 km/h through ultra low volume nozzles. The device, which is powered by a 6.Volts rechargeable battery, has a solid-state circuit that can produce an electrostatic voltage of 20,000 V.

848 Pesticide dispenser

SHELL INTERNATIONAL RESEARCH MAATSCHAPPIJI BV

Great Britain 2 146 530 (September 1983)

849 Method for encapsulating a pesticide

UNIROYAL INC

India 153 980 (September 1984)

The liquid or solid pesticide is first mixed with a carrier at a temperature between ambient and 100 C. The mixture is then added to water containing dispersing or wetting agents, under constant agitation. To the suspension so obtained one adds latex (containing a polyvinyl acetate polymer, or any other suitable polymer) under constant agitation. The product so obtained is then spray-dried.

850 Natural pesticide compositions

PARPEIX

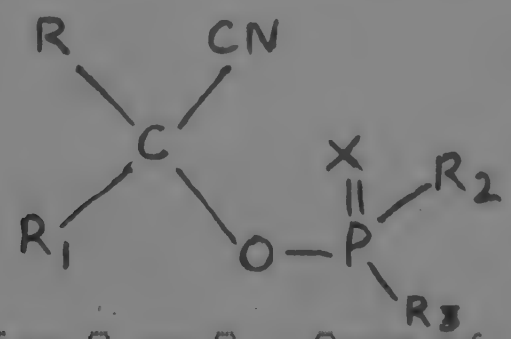
France 2 547 986 (June 1983)

851 Process for the preparation of novel phosphorus esters of cyamohydrins

UNION CARBIDE CORPORATION

India 154 876 (December 1984)

The novel phosphorus esters in question are represented by the generic formula:



where X stands for O or S. Some of these compounds - X stands for O - exhibit a very powerful pesticidal activity in very small doses. The compounds are prepared by starting with appropriate aldehydes and hetones, converting them to the corresponding cyanolydrives, and then reacting them with a phosphorylating group.

852 Methylisothiazolinones as pesticides

TOKYO ORGANIC CHEMICAL INDUSTRIES LTD

Japan 60 42 306 (August 1983)

853 Insecticidal composition

CIBA GEIGY AG

Europe 138 762 (September 1983)

854 Polymeric carriers for insect phermones and pheromone inhibitors

DEXTER CHEMICAL INTERNATIONAL LTD

France 2 548 873 (June 1984)

855 Hydroxybenzenes as termite control agents

JTAKEDA CHEMICAL INDUSTRIES LTD

Japan 60 56 903 (September 1983)

856 Methoxybenzodioxaphosphorin sulfide as an insecticide

DAICEL CHEMICAL INDUSTRIES LTD

Japan 60 42 315 (August 1983)

857 Fungicidal compositions

BP CHEMICALS LTD

Europe 136 137 (September 1983)

858 Fungicidal composition

BRANDES WILHELM AND OTHERS

Germany (West) 3 333 449 (September 1983)

859 Stabilization of fungicides

TAKEDA CHEMICAL INDUSTRIES LTD

Japan 60 11 402 (January 1985)

860 Mold growth inhibitor

DOMAIN INC

United States 4 514 425 (March 1982)

861 Process for the preparation of a systemic fungicidal mixture

PRODUITS CHIMIQUES UGINE KUHLMANN

India 144 268 (April 1978)

Fungicides belonging to the benzimide-azolyl carbamate family are being manufactured from rather costly starting materials like pure orthophenylenediamine. However, a fraction (S) rich in orthotolylenediamines can be obtained quite cheaply during the manufacture of tolylene di-isocynates. More than 90% of fraction S consists of 2, 3 and 3,4 tolylemediamines, which are present in the ratio of 3:1 respectively. Hence, the

fraction S has been used to produce a mixture of fungicidal orthotolylene diamines which are cheap and effective pesticides with practically no phytotoxicity.

862 Diterpene fungicides

INSTITUTE OF PHYSICAL AND CHEMICAL RESEARCH

Japan 60 06 632 (June 1983)

863 Pyrimidine fungicides

MITSUI TOATSU CHEMICALS INC

Japan 60 08 203 (June 1983)

INDEX

Acetic acid
production, fermentation 821
Acidulant 673
Alcohol
distillation 837
fermentation 838
Alcoholic beverages
adsorbents for 834
stabilisation, sorption agent 839
Amino acids
production by culturing Corynebacterium glutamicum 823
production, transamination 643
Amylases
production by culturing of microorganisms 832
Antioxidant
ellagic acid 649
Antistaling agent
dextrin alchols 676
Aroma
cocoa, enhancement 750
meat, improvement 723
L-Aspartic acid
production, fermentation 824
Bacteria
amino acid production from culturing corynebacterium glutamicum 823
immobilised, production of L-lysine 830
Bacterial starter concentrate
(for) dairy products 816
Bakery products
antistaling, composition 711
fats and oils for 754
preservation (by) whey fermentation 710
Beer
ageing 840
gas concentration, measurement 841
wort 842
Beet
sugar, determination
Beverages
citrus flavoured, (in) polythene containers 743
continuous carbonation measuring system 737
industry, filter aids for 736
instant 738
non-alcoholic 744
(from) rice hydrolysate 680
tartar formation, inhibition 739
Biomass
production from nitrogen free carbon sources 817
Biosynthesis
enzymes, production 831
Blanching
mushrooms and vegetables 693
Bran
rice, phytin isolation 681
Bread
yeast-leavened, low-calorie 712
Canning
fruits 697
Casing
tubular food casing 637
Caviar
preservation 735
Centrifuge
(for) separation of sugar crystals from mother liquor 631
Cereal
hydrolysate, beverage from 680
Cheese
imitation, containing modified starch 719
quality testing 718
Citric acid
production, fermentation 820
Citrus
storage in ozone 696
Citrus juices
bitter naringin and limonin, removal 742
wine, production 845
Clarification
turbid liquid food 633
Clouding agent
pectin-based 670
Cocoa
aroma and flavour enhancement 750
substitute 746

Cocoa butter substitute
779-80
Coffee
creamer composition, fat emulsions 772
decaffeination 745
mutagenicity, inactivation 742
substitute 746
Colouring substance
anthocyamin pigments 666
(from) cocoa 668
(from) enphansia superba 607
(from) red beet 669
Condiments
glutamate and nucleoside 783
salty 782
(from) soy sauce 784
synthetic, flavour improvement 785
Confectionery 704
Cooking
oil, cleaning apparatus 763
oil, waste solidification 764
rice, without ashing 679
Crustaceans
preservation by additives 734
Dairy products
(with) lowered calcium and increased magnesium contents 715
sterile, with decreased lactose content 714
Decaffeination
tea 749
Dietetic foods
health drink formulation with vinegar and germanium 791
health food, bifidobacterium as growth promoters 792
health food, ginserg saponin like plant extracts as additives 793
health food manufacture 791
health food, polyunsaturated fatty acid rich 794
Dough
conditioner 707-9
refrigerated 706
Drying
manufacture of dehydrated foods 634
compressed food, dried, easily reconstituted 634
Egg
white, whippable, additives for 728
yolk, ethanol extract preparation 727
Emulsifying agent 671
anticholesteremic (with) monolinolein 672
Enzymes
hops, inactivation 844
pectin, enzymic degradation 641
phospholipids, sugar derivatives, enzymic production 833
production biosynthesis 831
Ethanol
production, fermentation 836
Fats 755
cooking, lecithin containing 760-1
edible fraction of fatty material 758
edible plastic products 757
emulsions 770-1
emulsions, coffee creamer composition 772
hydrogenation 759
measurement 756
milk, determination 716
transerterification 753
Fats and oils
atmosphere pollution, prevention 751
azeotropic fractionation 752
(for) bakery products 754
Fatty acids
polyunsaturated, (in) health foods 794
Fermentation
acetic acid broth, alcohol concentration measurement 811
acetic acid production 821
alcohol 838
anaerobic alcoholic, control, 812
carbon concentration measurement 813
citric acid, production 82
continuous, (of) whey permeate 720
ethanol production 836
glutathione production 827
L-aspartic acid production 824

L-lysine production 829
L-threonine production 828
L-tryptophan production 825
malolactic 815
media, spectrophotometry 814
ultrafiltration of fermented liquor 835
whey (for) bakery product preservation 710
Fish
freshness determination 730
frozen, coating
(as) meat substitute 731
Flavour
cocoa, enhancement 750
fruit juices, enhancement 741
meat, improvement 723
synthetic condiments, improvement 785
sweetening substance, improvement 653-4
undesirable, elimination 636
Fortification
food 805
Fractionation
azeotropic (of) fats and oils 752
Freezing
fish, frozen coating 732
Fried foods
(of) reduced oil absorption 781
Fruits
canning 697
Fruits and vegetables
crisp snacks from 690
preservation 687-8
Fruit juices
flavour enhancement 741
ion exchange treatment 740
Fruits
selection according to sugar content 694
storage units, climate control 895
Fungicides 857-8
benzimide-azoloyl carbamates 861
diterpenes
mold growth inhibitor 860
pyrimidines 863
stabilisation 859
Glutathione
production 642
production by yeasts 826
production, fermentation 827
Hops
constituents, extraction 843
enzyme-inactivated 844
Hydrogenation
fats 759
Infants foods 795
(based on) milk powder 717
Insecticides 853
hyoroxybenzenes 855
methoxybenzodioxaphosphorin sulphide 856
Jelly
powder 705
Lactic acid
(from) immobilised Rhizopus 822
Legume
protein isolates 684
seeds, treatment 683
Lipids 765
extracts, ubiquinone recovery 766
L-lysine
production, fermentation 829
L-Lysine
production from immobilised bacteria
Malt 682
Margarine
production 773-4
Meat
analog, sterilisation and stabilisation 725
cuts, tenderisation with xanthan gum 724
flavour and aroma improvement 723
quality control 722
substitute (from) fibrous protein 726
substitute from fish 731
Microorganisms
cultivation medium 807
culturing (for) L-amylase production 832
deactivation
immobilisation 809
Milk
fat, determination 716
powder, infant food 717
Monoglyceride
additive, mutagen-inhibiting 674
Mushrooms
blanching 693

Noodles
fast cooking 713
Odour
undesirable, elimination 636
Oils
cooking, cleaning apparatus 763
cooking, waste solidification 764
edible, low-calorie substitutes 762
phospholipid, solubility improvement 767
Oilseeds
treatment 683
Packaging
autoclavable and gas sterilisable 640
device 639
food 638
Palm oils
refining 776
Pectin
clouding agent, pectin-based 670
Pectin
enzymic degradation 641
Persimmon
astringent, sweetening 789
Pesticides
cyanohydrin phosphorous esters 851
dispenser 848
encapsulation 849
liquid, spraying equipment 8847
methylisothiazolinones 852
natural 850
L-phenylalanine
by lyase-containing substance 644
Phermones
polymeric carriers for 854
Phospholipid
oils, solubility improvement 767
reforming 768
sugar derivatives, enzymic production 833
Pickling
vegetables, calcium-rich 691
Polishing machine
rice 677
Polyphenol oxidase
heat stable, manufacture 695
Polysaccharide
processing 702
production 701
Potatoes
fresh, peeled, preservation 692
Preservation
caviar 735
crustaceans 734
fruits and vegetables 687-8
potatoes, fresh, peeled 692
wine 846
Preservative
ethanolic 675
heat-and cold-stable 648
Protein
concentrates, granular, (from) plants, recovery 801
fibrous (for) meat substitute 726
from plants 800
hydrolysate, taste-modified 798
isolates 797
isolates, hydrolysed, (from) plants 802
isolates, (from) legumes 684
modification and conformation 796
off-flavour removal, steam stripping 799
textured 803-4
textured (in) tomato sauce 787
Pumpkin oil 778
Quality
cheese, testing 718
meat, control 722
Refining
palm oils 776
Refrigeration
dough 706
Rhizopus
immobilised, lactic acid production 822
Rice
bran, phytin isolation 681
cooking without ashing 679
polisher 677
quality improvement 678
Safflower oil
lecithin mixture as food additive 775

Salt substitute
pottasium chloride coated with maltodextrin 646-7
Salmon roe
processing 733
Sauce
mix, white, emulsion characteristics improvement 786
soybean, low-salt, salty taste increase 788
tomato-based, containing textured protein 787
Sausage
casing, seamed cellulosic 729
Separation apparatus
(for) sugar crystals from mother liquor 632
Single cell protein
(from) organisms grown on methanol 818
Snack food
crisp, (from) fruits and vegetables 690
Soybean
meal, products from 685
milk, calcium-enriched 686
sauce, condiments from 784
sauce, low-salt, salty taste increase 788
Spectrophotometry
fermentation media 814
Storage
citrus in ozone 696
fruits, climate control 695
Starch
hydrolysates 703
modified, (in) imitation cheese 719
Sterilisation
meat analog 725
Sugar
constant density sugar solution production 698
crystals, separation from mother liquor 631-2
(in) sugar beets, determination 700
syrup 699
Sweetening substance 650-2, 655-6
aspartame 661-3
dipeptide, 657-60
flavour improvement 653-4
stevia 664
synergistic, acesulfame containing 665
Tea
decaffeination 749
green, calcium-enriched 74
Tenderisation
meat cuts (with) xanthan gum 724
L-threonine
production, fermentation 828
Tocopherol
high purity, production 70
Tomato
sauce, containing textured 787
Transesterification
fats 753
L-tryptophan
production, fermentation 825
Vegetables
blanching 693
fresh, discolouration prevention 689
pickled, calcium-rich 691
Vinegar
production 819
Wheat germ oil
production 777
Whey
permeate, continuous fermentation 720
Wine
stabilisation and preservation 846
Wort
beer 842
Xanthan gum
meat cuts, tenderisation 724
Yeasts
cultivation 810
gutathione production 826
Yoghurt
sweetener, aspartyulpheny-lalanine methyl ester 721

Regd. No. 36730/84

Printed and Published by Dr. B. L. Amla, Director, Central Food Technological Research Institute, Mysore 570 013 at C.F.T.R.I. Offset Printing Unit. Editor : Shri S. V. Sangameswaran, C.F.T.R.I. Mysore